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The House Decoration Series

CEILINGS AND THEIR DECORATION

THE HOUSE DECORATION SERIES

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Study for Ceiling of the Banqueting Hall, Whitehall Palace.

CEILINGS AND THEIR DECORATION

ART AND ARCHÆOLOGY

By

GUY CADOGAN ROTHERY

AUTHOR OF

"SYMBOLS, EMBLEMS AND DEVICES,"

ETC.

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PUBLISHER'S NOTE

In this series an attempt is made to deal with the archæological and art side of buildings. With this end in view the main features of architecture, which concern at once comfort and æsthetics, are treated in separate volumes, the evolution from early times to our own day being traced as closely as possible. While coming essentially within the demain of popular archæology and art, an endeavour is made to draw practical deductions from these studies. A reasonable interest in, and reverence for, antiquity can, and ought, to assist in applying art to actual requirements of everyday life. For, after all, one of the chief advantages of an appreciation of the efforts of past generations is that it teaches us what is worth preservation, what we may usefully strive to restore, and how we may improve upon old practices to meet changed circumstances.

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The ceiling is so important an expanse in every room, be it big or little, that we cannot afford to ignore it from the æsthetic point of view. Unadorned or badly treated it becomes painfully obtrusive. Our ancestors understood this well, and happily we are once more recognising the ceiling's importance in the scheme of house decoration.

While the subject has not been altogether overlooked in art and architectural literature, there has hitherto been little effort to collect and collate the information found scattered in many works, or to record results of the study of actual examples. It is therefore felt that it is fitting to begin the series with the present essay.

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CEILINGS

CHAPTER I

EVOLUTION OF ROOF AND CEILING

ALL early examples of human habitations are extremely perishable in kind, for in the nascent stages of architecture the prototype of man's dwelling is the nest, blending with, and proving little more than an excrescence on the natural surroundings. These nests may be made of a bundle of reeds, some lithesome tree branches more or less cunningly intertwined, bent to the builder's requirements, and so disposed as to form a shelter. Elsewhere we may find a hollow scooped out at the foot of a hill, as in the troglodytes' caves; or more laboriously contrived high up the cliffside, like those of the *gitanos* in Spain, or man's immemorial refuges in those long ranges of mountains sweeping with a north easterly

trend across Southern France well nigh from the Pyrennees to the Alpine regions. This type we see also in the recluse cells of Nipaul and Thibet.

Even more rudimentary is the hole dug in the ground, partly concealed by a protecting wind and rain screen, composed of mud, which eventually became a built over semi-dome. Types of these we may see in the Dane or Dene holes of Essex and Kent; or further afield in those shell-proof excavations on the banks of the Tugela into which General Cronje crowded his motley army with all its lengthy tail of women and children, only a brief ten years ago.

In speaking of any architecture as extremely perishable, reference is made only to the structures themselves, for the principles involved, the types presented, are persistent and lie at the base of our most daring practices of yesterday and to-day, evidence of their origin being sufficiently abundant all around us. It was clearly from these types that the more elaborate structures were evolved. We have another great source of inspiration in the

beehive huts common to primitive races the world over, and generally constructed of bent bamboos, interwoven with reeds, with here and there stronger timber posts, and provided with a domed roof. This dome sometimes assumes the conical, and thus becomes the rudimentary pinnacled roof and the tower. Such reed and rush form of coverings, of course, survive in our straw-thatched roofs. Thus for a long time in modest abodes roof and ceiling were one. Anthony á Wood says that chambers and humble dwellings of old had no ceilings, "a custom" he adds, "not uncommon anciently in the upper rooms of our colleges at Oxford; these were vaulted with reeds bruised and flattened," the true forerunners of the flat, pliable laths.

Another source of the dome is the dug-out nest with mud screen, which gradually grew into the hummocky hut, built of sodden clay, of clumps of turf, or of the more regularly formed bricks, sun dried or burnt. It is, however, well to note here that the term *camera* which was applied in Rome to the barrel-vaulted chamber,

and eventually came to denote a room of any kind, was originally applied to anything covered. Herodotus so applied it to a wagon. The same term was used to describe the garden trellis work. Both these are sources of the barrel dome : the tent on wheels, and it is interesting to remember that we call a certain pattern of barrel vault—with flat ends—a wagon ceiling, and we apply the same word to the trellis-work frame of the rush built hut.

The flat dome is a common enough feature over large tracts of Asia and also of Africa, that is, in low-lying lands where timber is scarce, and mud or sand plentiful. Ferguson points out that Bengal is without stone or wood, and in its advanced stage is essentially a country of brick buildings. "The Bengalis," he says, "taking advantage of the elasticity of the bamboo, universally employ in their dwellings a curvilinear form of roof, which has become so familiar to the eyes that they consider it beautiful. It is so in fact when bamboo and thatch are the materials employed, but when translated into stone or brick architecture, its taste

is more questionable." This is a criticism that can scarcely be sustained as regards interior effects. At all events it is a survival which has become a permanent feature of Bengal architecture, finding its way in the seventeenth century to Delhi, and reaching Lahore some hundred years later. In course of time the flat dome often became concealed from the outside, the building presenting a rectangular form on the exterior, but inside, the roof or ceiling shows itself as a series of very shallow, saucer-like domes, one dome to each chamber, or a series of domes covering one long chamber.

Again we have the stupas or relic mounds, which the Buddhists have carried in ever varying shapes over a great part of Asia and the East. Professor MacDonell traces the stupa in its earliest existing examples to a solid mound, surrounded by a processional gallery, surmounted by a tee, or ceremonial umbrella. As time advanced the stupa was provided with a chamber, of course, vaulted, and it became less squat, more like a cone, and as the structures were set

up in the eastwardly march of Buddhism they grew taller, the tee especially shooting upwards, one umbrella being superimposed upon another until it grew into the Burmese and Chinese pagoda. Unquestionably the stupa, as traced by Professor MacDonell presents one of the most striking instances of the disturbing and often expanding force of local surroundings. It must be remembered in this case the form of building was carried from a flat, treeless region to tall timbered lands. But if the stupa is merely a specialised description of cairn, at once a monument as well as a decency tomb, it nevertheless may be taken as a prototype of a dwelling for the living. Professor MacDonell says the earliest extant example of the stupa is that at Piprahwa, which probably dates back to 450 B.C. More primitive types must, however, have been put up ages before that.

The stupa is a mound, in shape it is moulded on the low reed framed and mud plastered hut. The processional gallery round the top, and the encircling fence placed at some distance round the mound,

although for ages past built of stone, heavily carved, still retain the forms and patterns of wooden palings. However, in many regions it is probable that the tombs formed the pattern of the more permanent kinds of dwelling houses. Man built houses of reeds or wood for his own habitation, but of stone for that of the dead. This is quite natural, for when men were content with the tent and the reed hut, surrounding conditions made it necessary to provide more substantial protection for the dead. Shallow sepulture with the built-over cairn presented the easiest and most obvious method at once to keep out enemies and scavenging animals, and to keep in the departed, for, according to most ghost and vampire lore, the wandering "shadow" or spirit was powerless without the body. It is noteworthy that the tee, or umbrella expansion on the stupa, and even over the pagoda, is topped by a vase-shaped ornament, which we may take to be a simulacrum of the head of a prisoner or slave usually placed on the umbrella spike to mount guard and scare away evil spirits from the tomb and the

dwelling house. Indeed, the weather-cocks, the staff supporting fluttering bunting, and the floreated, often horned pinnacles which adorn our roofs are merely survivals of the older grim guardians—the grinning skulls of prisoners and slaves, or of fierce buffaloes, which leaders of men placed over or immediately in front of their places of abode. As Herodotus said of the Scythians, "The reason that the heads (of dead enemies) are set up on high is in order that the whole house may be under their protection," and the powers of the air kept away. The same practice persisted widely down to our own days. We may see its modification in many islands of the Malay Archipelago, where natives place long poles with horned ornaments before their houses, frequently adorning the roofs with horns, further modifications of which may be traced in the curved lines of the pagoda roof and their boss-like vertical ornaments.*

* Lieut.-Col. Sir Richard Temple, in speaking of the wild Was of Burma, says that human sacrifice, which prevailed all over Burma until recent times, "has always risen out of the idea of self-protection. In all its forms its object has been to create a

Thus it will be seen that the futile weathercock and too often meaningless finial have a fairly ancient, and at all events awe-inspiring ancestry. Nor need we hesitate to attribute the same origin to the wreathed horned ox skulls which the Greeks used with such good effect to adorn their friezes and fill their metopes. These Greek bucrania, with the other horned beasts employed by Asiatic architects as capitals to their columns, such as, the Indian adaptation of two kneeling elephants or tusked elephant heads, often found their way into the decoration of flat surfaces, and to this day, form a permanent *motif* in internal frieze and ceiling adornment.

Another, remarkable funeral monument and abode of the dead, the pyramid, is a copy in lasting stone of the less enduring dwelling of the living. In this instance it is the nomad's patchwork tent of skins

guardian spirit to look after the interests of the sacrifiant, the idea being that the haunting ghost of the victim should hover about the spot and keep off all the evil-minded strangers." He adds: "Not the least interesting point about this practice is that where it is breaking down, substitution of the heads of animals for human heads takes place."

or rush mats which served as a model. Here, too, we have a great pile with small chambers deep in the mass, wherein honoured remains could be safe from human enemies, ravening carnivora and from floods. One result of this evolution from the cairn and cavern was the discovery of the many advantages attaching to the employment of thick walls in hot climates; for heavy walls and small outlets mean cool internal chambers. Another deduction from the tent and pyramid was the immense advantage of sloping the outer surface of a wall from top to bottom wherever resistance to wind pressure, to earth disturbance, or to drifting sand had to be faced.

This is a marked characteristic of certain classes of buildings in Egypt, a common attribute of Assryian architecture, and so may be traced across the plains and plateaux of Asia in mud and stone structures, to the forts, palaces, and monasteries of Thibet and Bhutan, standing sure-footedly on the apparently inaccessible cliffsides or mountain tops.

Another influence is seen at work on

Loggia, Court of San Damaso. Vatican.

alluvial plains and the margins of sandy wastes, where the horizon stretches far in every direction; in such places, there is a tendency for most things to be reduced to flatness or hummockyness. Hence, in Northern Africa, in parts of India and over extensive tracks of the great Asian plains we have the rounded hill-like dwelling, though more generally the low rectangular construction, which, from a distance is lost in the wide sweeping undulations which take on the semblance of a monotonous dead level. Quite commonly these squared buildings are vaulted internally, then we have a series of cells each covered by a shallow dome, or a single chamber covered by a series of such domes, as already mentioned. This arrangement is certainly suggestive of the excavated mound or the cavern, where the internal shape of the chamber is neither influenced nor betrayed by the outward envelope. In Egypt, however, the vault was rarely employed, at least for large chambers; primitive timber and reed coverings suggested the form of the later stone slab roofing and ceiling.

Persisting traces of the primitive use of

timber are afforded by pillars and sham rafter ends. The Egyptian pillar has well defined base or root, shaft or stem, and capital or foliated head. It represents either the palm tree or a bundle of reeds, both forms being used and in some cases it is realistically carved and painted. At a later period the column appears as a single lotus or papyrus stem, with basal leaves and terminating with a single flower or a group of blooms. Curiously enough the band used for tying the bundle of reeds was retained half-way up the single lotus stem column, a useless relic of tradition. In certain Greek temples wooden columns supporting the ceiling beams were covered with bronze, beaten to represent the scales of palm trees, the metal being gilt. In classic architecture we often see small cubes of stone slightly projecting at regular intervals between the top of the wall and the frieze, or between the frieze and metope, which have no structural duties and are unrepresented inside the building. These are merely a mimicry of the abandoned wooden rafters, serving no useful purpose, but often of real decorative value.

Some forms of the pillar and certainly the pilaster, or pillar partially imbedded in the wall, are reminiscent of quarry practice. To this source, too, we must go back for a curious and effective form of ceiling decoration, the stalactite ornamentation, consisting of closely set pendant cones, with corrugated sides, such as we find in a conventionalised form crowning the Hall of the Abencerrages in the Alhambra.

In certain regions the tent evidently gave rise to the high pitched dome. And in other regions where wood, in the form of substantial timber, was the prevailing building material, where mountains and trees surrounded man, an aspiring type of architecture arose, notable for its shelving, water-shedding roofs, drooping eaves protecting the walls and openings, and its internal upward slant designed to train smoke from the smouldering fires to a central hole in the roof. All of this was an unconscious mimicry of local environment. In this way we come by the forest and Alpine type of cottage.

Akin to the forest, too, is the Gothic, which was developed among timber-using

folk as an evolution from the Romanesque or Norman order, itself a modification of the classic style. As it gradually developed and rose to its apogee it betrayed a constant tendency to revert to woodland types, and forms. This is shown in the grouped columns, as, for instance we see them in the Early English style—a number of circular pillars forming a circle round a larger one, or as the column is later presented to us, with its capital expanding, splitting up like branches and merging directly into the spreading ribs of the arches. So we walk under the dimly lit forest avenue. In the domestic Gothic we have wondrously timbered roofs, and still more suggestive is the diagonal joining, an ornamentation consisting of small beams (later carried out in brick or tiles) placed obliquely, chevron-wise (V joined to inverted Λ) in panels formed by larger beams, running at right angles.

As for the ceiling itself, we may, for our present purpose, take the term in its widest sense, cœlum, the sky, or covering of the chamber, though technically the word is applied more particularly to the

inner lining of a roof, and to the lining of the under part of a floor. We are often loosely told that the type most apt to come to our mind, the plastered ceiling, is a modern thing. Of course the stucco ceiling, both flat and vaulted, was known to the Greeks and Romans, and to the Egyptians before them, and was, indeed, as we have endeavoured to show, the direct outcome of the above mentioned mud semi-dome, and the wattle and daub method of construction, in which matted reeds or intertwined twigs and branches were plastered over outside and inside with clay in order to make them weather-tight.

This reed and twig tradition was preserved by the Egyptians even when they had substituted stone slabs, for they painted their stucco ceilings with water plants and matting designs; on the other hand the intricate criss-cross of timber construction has given us the effective coffering, or deep square and oblong pits in carved and plastered ceilings, types which we shall deal with in subsequent chapters.

In his "Grammar of Ornament" Jones lays down the proposition that: "Archi-

tecture is the material expression of the wants, the faculties and the sentiments of the age in which it is created" to which we assent with the addition : that it is also subject to the profoundly modifying and often fettering traditions of the immediate or forgotten past. He goes on : "Style in architecture is the peculiar form that expression takes under the influence of climate and materials at command." But tradition plays at least as important a part as climate or materials. No style is all of one piece. It has its roots in the past, and its growth is subject to quickening breezes or blighting currents from many outside climes. Perhaps the happiest styles, those having the most lasting effect, are those which have been introduced from a foreign source, absorbed by an artistic people and bent to their own needs. The Greeks, the Mauresques, the mosaic workers of India, the Japanese are witnesses to this, and to the fact that the principles underlying architectural and decorative practice are survivals of a past outlived, but still gripping us for good or evil.

CHAPTER II

CEILINGS OF THE ANCIENTS

Such knowledge as we possess of ancient Egyptian architecture relates chiefly to the temples and palaces. Flat stone slabs covered these buildings, vaulting apparently being reserved for narrow passages and occasionally some inner cell-like chamber. The interior surfaces of the stone structures, walls and ceilings, were frequently rendered smooth with a coating of plaster. Colour schemes were handled with great boldness, both on the flat and on the low and high relief carvings. A most interesting procedure was adopted. The whole surface to be decorated was divided up by lines drawn at right angles, thus presenting the appearance of "squared" paper. With this assistance the drawing was outlined in red chalk. Another artist went over the whole with

black paint, improving the drawing as he went along. Then came the sculptor who carved out the design, and finally, the painter, who, with his brushes and trained eye, gave life to the whole. The corroding influence of time which reveals many secrets, has betrayed the methods of these cunning men of past ages. We see how the work was improved step by step. Even the carvers' completed efforts were subject to destructive criticism on the part of the master painter. Limbs of figures, details of pictures finished in alto-rilievo, have in many instances been chipped away; new attitudes, altered combinations, being produced by the simple process of modelling a lump of stucco in situ.

Ceiling decoration, however, was mostly on the flat, but a combination of methods was used when the favourite scheme of carving the ceiling to symbolise the blue sky spangled with yellow stars was adopted. Additional symbolism was introduced when the signs of the zodiac were grouped about a central rosette, or placed as a border round the chamber. Among other symbols was that poetic rendering of

the sun's daily flight cross the heavens, the winged disc. This reversal of a diurnal miracle has arrested the attention of all races, who have endeavoured to give pictorial expression to the phenomena in many ways. The Egyptians and Semitic people gave the sun wings. In far Asia it took the form of a wheel, or more mystically the cramponed cross. Another form of this is the familiar three bent naked legs of Sicily, conjoined by a central sun in splendour or a plain disc, which was brought by the Norman conquerors of the Mediterranean isle to Mona in the form of three conjoined and bent armoured legs. The Greeks and Roman picture Phæton driving his chariot drawn by milk-white steeds across the sky and setting the heavens aflame. All of these have become common property among many ceiling decorators.

That other Egyptian sun symbol, the open-winged vulture (replaced by the eagle in the East, Greece, and Rome), was often seen on ceilings, holding in its paw either a key of life—the andk, or tau tipped by a ring; or a great plumed quill suggesting

the soul's journey to the under-world. Lotus and papyrus buds and blooms were used as central rosettes or as borders just above the cornice, the colours being green and white, picked out with red and yellow. Speaking generally, Egyptian ceiling decorations partook largely of the geometrical; intricate combinations of curves and straight lines. There is much that is interesting about these, because in many of them we can trace a conventionalised pattern of reed matting (arrangements of yellow, white, red and green thin stripes), which in the far away past had formed an important part of the builders' materials. In the interwoven patterns we find the web and woof of the papyrus and lotus stems, though these designs were elaborated to represent those interminable knots belonging to the concealed part of religion, and symbolising those "Words of Power" known only to the inner circle of the initiate. With the mat and knot patterns are associated those conventionalised symbols of water, the wavy line, the chevron or broken line, and the whirlpool, or three lines starting from a central point and

Loggia, Court of San Damaso, Vatican.

circling outwards to give the effect of gyration. Often the latter symbol was drawn in endless series, the tails of one ornament joining others, to form another point of departure, so that the whole surface presented a mass of involuted figures, conveying an accurate notion of a turbulent, eddying flood.

Colour, as we have said, was employed boldly, the schemes being based on the laws of contrast. We see patterns traced in black on red or buff, white on black or buff. But vivid effects were obtained by the daring juxtaposition of blacks, bright reds, blues and greens, yellow being brought in as a harmonising medium, as well as a means to throw into apparent relief a pattern traced in other colours.

Of the Babylonians and Assyrians we know that they affected rather long, narrow rooms, with vaulted ceilings, though the dome was also employed and the cupola not infrequent. The walls were immensely thick, built of comparatively small sun-baked or kilned bricks. These walls were often thicker at the base than at the top, having an outward slope. The

roofs were generally rectangular, concealing internal vaultings.

A form of stucco covered both walls and ceilings, which were decorated with vivid colouring. Their flora was of the radiating description, branches reaching out from a central stem, like an espalier fruit tree; they represented the pomegranate thus. We also owe to them the palmated fan-shaped ornament consisting of central leaves or club leaf with similar leaves spreading out right and left. It was a favourite with the Greeks. The Assyrians also used pine cones freely as a motive in decoration, these being connected with tree worship.

A peculiarity of the structural design was that, although the doors were tall and wide, windows were unknown. It would appear that light and air were admitted high up in the lofty ceiling by means of cylindrical brick tubes, placed in the thickness of the building at such an angle as to exclude all direct sunrays, while allowing shafts of light to penetrate into the interiors. It is a device utilised in a modified form by the Greeks and Romans.

It is noteworthy that colour, even vivid contrasts of primary colours, has always been not merely a decorative, but an essential part of the best periods of architecture in sun-bathed latitudes, the idea that white, or monochrome, would be more grateful to the eye and give an appearance of coolness not entering into the philosophy of builders or the mass of the people. The truth is, of course, that the builder's first anxiety under such conditions has ever been to keep out the sunrays and tone down all glare. This end was attained by adopting such means as were resorted to by the Assyrians; by placing small windows deep set in thick walls high up in rooms, screened by such devices as the Mauresque mushrabayah traceried woodwork; by having great blank walls, as in the characteristic Spanish cathedrals, with their sombre mysterious feeling, the richness of carving, colouring and gilding being visible in glimpses, illumined by thin shafts of light from the rare deep-coloured windows; or by the methods used by the Greeks in the construction of their temples. With these precautions it was

both possible and desirable to give free scope to the healthy love for brightness and natural mingling of colours by adorning walls and ceilings with the purest pigments, because such a system assisted in producing fine illuminating effects with the feeblest admission of light from outside. We find this state of affairs prevailing all over Southern Europe, in Asia and countries overrun by the Arabs.

In prehistoric times the dwellings of the Greeks were circular, having a framework of wood or stone filled in with rushes daubed over with mud. Probably the roofs were of the pointed and flat-domed types.

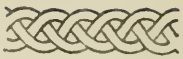
Coming down to historic times we find that the roofs of their temples were mostly flat, or nearly so. In the most simple form, the single cell temple, the oldest example of which we have records being that on Mount-Ocha in the Island of Eubœa, the roof consisted of large thin slabs of stone, each slab projecting beyond the course below, till they met at the ridge. Light and air were admitted through a long

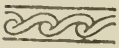
narrow slit in the roof, the hypæthral opening. In later periods the roofs were sometimes formed by timber rafters supporting baked clay tiles, the ceilings consisting of boards either painted or covered with stucco or encaustic tiles. But slabs of stone and marble continued as the favourite materials, being most carefully dressed so as to form perfectly weather-tight joints. Simpson says the ceilings of the exterior ambulatories were of marble. This was usually so as regards the peristyle, and certainly in some instances as regards the pronaos and the posticum. The great slabs of stone or marble were placed under the roof, and were decorated with deeply sunk coffers, called lacunari from lacus, a lake. They were cut in the solid, and though of great decorative value undoubtedly represented those pit-like spaces naturally formed when a network of roof timbers were left bare. These lacunaria were enriched with delicate mouldings on their edges, and painted designs filled the centres. As regards the inner parts of the temple, two methods seem to have prevailed. Some-

times the under side of the roof was exposed, both the supporting woodwork and stone slabs being painted and gilt, often with elaborate designs. Many marble tiles have been discovered with their under sides painted with ornaments. At Tyrius fragments of alabaster frieze not only bore delicately carved designs of rosettes and spirals, but were studded with bits of blue glass or paste, giving a charming jewelled effect. Other pieces of this kind have been found at Mycenæ and elsewhere. Flat ceilings of wood and of stone tiles were also used, all visible parts were painted and gilt. Vitruvius speaks of roof panels painted blue by the wax encaustic process. Red and blue were the prevailing colours, with gold employed to mark out designs and to harmonise the whole. But black on red or buff, as well as red and black on white, also came within the colour schemes, and, as we have seen, glass was introduced to heighten effects. The designs included rosettes, floreated scrolls developed in moderate lines, and wonderfully intricate traceries of narrow bands. The innate love of the Greeks for the

beautiful is revealed in the graceful treatment of these lines.

What an astonishing variety of forms the fret as developed by them bestows on us. No wonder that they have been accorded the freedom of the universal treasure-house of decoration. Consider the fret in its simplest form, with its continuous horizontal and vertical lines shaping into crenelations, or with these lines inclining inwards producing those wedge-like figures forming the broken batoon; or, again, that other modification, where the right vertical line is bent inwards, so that we have the tooth of the upper part of the letter E, this insignificant change giving us the dignity of the Greek key pattern. How well those can be blended, superimposed one upon another, until we obtain the endless variations of the meander. Germane to these, yet how different is the guilloche, with three loosely plaited withies, so effective when placed between the two pairs of horizontal lines, each pair enclosing its rows of pellets, olives or billets. Thoroughly characteristic of Greek methods was the





LINE ORNAMENTS

treatment of those universal graphs of water, the wave and undulated lines and the chevron. With them the usual joined sloping S's were given an elaborately voluted form, and often foam was represented by a backward sweep from the crest, which developed into a dentated leaf with voluted tip. The undulated lines with its continuous series of flat domes and depressions of equal depth underwent many variations, while the chevron was usually doubled and given a sculptural finish, blending well with its architectural surroundings, as its esoteric meaning became obscured. All these were utilised as beautiful frames, delighting the eye on ceilings and walls, full advantage being taken of their flexibility and fluid nature. Thus by their help and the judicious combination and well thought out modifications of horizontal and vertical proportions, the length, breadth or height of a room could be accentuated or visually rectified. With these wavy and broken lines the artist may train the sight, occupying and pleasing the eye without fatiguing it.

In the domus, ceilings were commonly of the semi-circular vault or "barrel" type. The extrados, or hollow space above, was filled in with concrete to form the roof or a floor above. This appears to be the old, persisting form, but there was a special reason for the roof being flat and protected by a parapet, because it was used as a solarium, where the enervated citizen exposed his skin to the revivifying sunrays.

Flat ceilings, however, were seen in ordinary houses, and at all events in the more public rooms. Considerable luxury was displayed in decorating surfaces, coffers and panels forming part of the scheme of design, in the carrying out of which not only painting, but ivory, ebony, precious marbles and even gilt bronze plates were used. Plato refers to painted ceilings, though the general spread of such lavishness came after his days.

Even amidst the triumphs and luxuries of the Empire, Rome kept alive memories of her primitive simplicity and humble origin, for on the Palatine Hill were kept standing the casa Romuli, small straw-

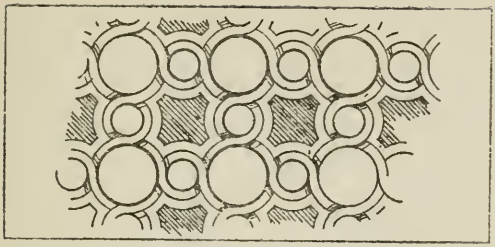
Details from First Floor Loggia, Court of San Damaso, Vatican.

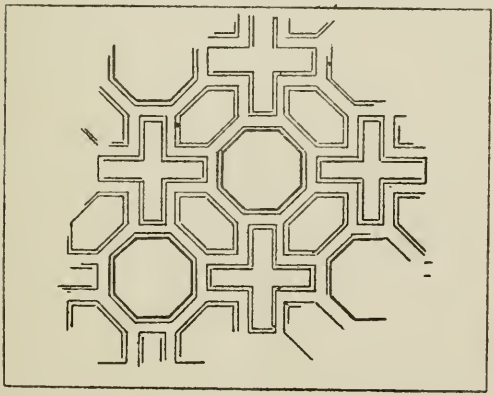
thatched wattle and daub huts. Although in private houses flat ceilings of wood, stone or brick, generally covered with stucco, were common enough, the semi-circular vault preserved old traditions. In many of the larger chambers, where the greater part of the surface was flat, the sides were concave, producing the coved ceiling.

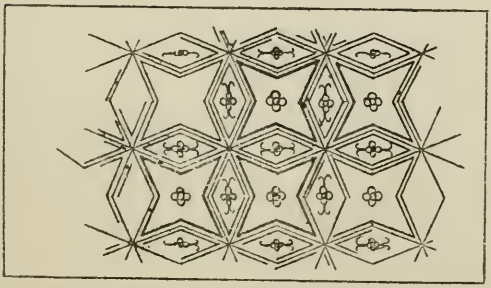
As regards their temples, the architecture was derived from the Etruscans, the earlier examples being of wood, with steep roofs, ornamented with painted terra-cotta, while cornices and ceilings soon became loaded with sculpture. Later, both in temples and public buildings generally, the dome, either circular or octagonal, became the prevailing feature, while long and square chambers were more or less deeply vaulted. It is to be noted that the cupola, that inner lining forming the ceiling, often differed both in size and character from the outer covering or dome proper. This is, of course, the principle of what we now strictly call ceiling. In Rome the principle was also applied to painted walls. We have seen that the first

temples were built of wood, and a reminiscence of this remained with the Roman builders to the end. A large percentage of ceilings, whether of wood, brick or stone, bare or stuccoed, flat or vaulted, were divided up into rows of deeply sunk panels, the lacunaria or coffered type, which had also been developed in Greece from the same starting point. These lakelets were richly decorated, both on the bevelled sides and the centres. Quite at an early period the mud lining was replaced by a splendid plaster in which powdered marble was the principal base.

This stucco dried with a brilliantly polished white surface, and became as hard and durable as stone. Fine specimens of it have come down to our days. Three methods of painting were adopted. The water-colour frescoes gave a beautifully soft effect, but inasmuch as brilliance and depth had to be secured by repeated applications of washes as the colour sank in the damp plaster, the speedier and more sure way of obtaining richness associated with tempera, where the glue used as a medium enabled gradations of tints to be







ROMAN GEOMETRIC AND MOSAIC WORK

secured without opaqueness, came into general use. Even sharper and richer results were obtained with the encaustic method of mixing the dry pigments in melted wax, and applying them hot to the half-set plaster. In any case a considerable depth of the stucco was permanently stained, while the very nature of the material provided a light-reflecting surface, giving brilliancy and transparency to the finished pictures. But Roman artists were not content with dipping their brushes in gorgeous pigments or applying resplendent gold. They enriched their ceilings with decorated tiles and slabs of variegated marbles. Wooden ceilings were inlaid with ivory and ebony both for the sake of display and the effective contrast of the satin-surfaced white and black materials. Horace, as evidence of his modesty, declared that his house had no walls adorned with ivory; on the other hand, Pliny writes of ceilings decorated with bronze plates. Varro recommends the painting of ceilings in imitation of the sky, with a movable centre star of metal, its index rays passing over a radius

to indicate the direction of the wind and the passing hours. No doubt the winds could easily be indicated by the star being controlled by an outside vane, but in order to mark the passing of time from sunrise to sunset we must suppose a hypæthral opening, by which a thin shaft of light could travel over the radius.

Central decorations were among the early canons of the decorator's art, very commonly taking the form of a rose or of an elaborate palmated boss, such as still oppress us, and evidently a survival of the days when a bunch of straw marked the highest point of conically thatched cottages, or the ornamental fringe surrounding a tent pole. As regards Varro's reference to mechanical devices, we find the Abbé Montfaucon stating that: "The ceilings of ancient palatial buildings were covered with ivory plates, which moved and turned round in such a manner that at intervals they could make the ceilings rain flowers and perfumes," a contrivance highly suggestive of some exotic custom brought back by Imperial generals from their eastern conquests, or

perhaps introduced by way of Greece from those undated eruptions of Asiatic influences, symbolised in poetry and art by the triumphal progress and campaigning of Bacchus in far-off lands. Mosaics, composed of cubes and other regular figures or irregular fragments of marbles, were largely used for decorating the ceilings and vaults of houses, temples and baths, but the use of small encaustic tiles and glass for this kind of work did not find favour in Roman practice until the Byzantine Greeks brought them in the sixth century.

Pliny in his description of the Golden House of Nero is responsible for the statement that the Emperor built it of a clear stone, found in Cappadocia, which was so transparent that in the daytime those who were within saw the light when the doors were closed, though there was no passage left for the light, and, therefore, the stone, from its brightness, was called phengites, from phengos, brightness. Montfaucon supports Pliny in this, saying: "At Florence in the Church of St Minias, there are windows with alabaster tablets in

them instead of glass, each of them covering one window though they are about 15 feet high, and yet the church is light." The notion that the ancients used transparent stones for roofing their temples has been seriously advanced as one way out of the difficulty of explaining how the windowless interiors were lighted. Probably the truth is that the hypæthral openings were so cunningly contrived, that the thin shafts of light striking on the glistening, semi-transparent stone, or glass-like stucco, produced an effulgence inducing the illusion that the light actually shone through the roofing material. The theory that the transparency of thin sheets of marble or alabaster was utilised for transmission of light, however, is absolutely contradicted by what we know of the methods adopted in decorating interiors of all kinds.

All art is the result of many influences; Roman art was peculiarly the product of outside forces acting on robust natures. The Etruscan wave received fresh volume from the East, ultimately to be smoothed down, by the great, calm flood of

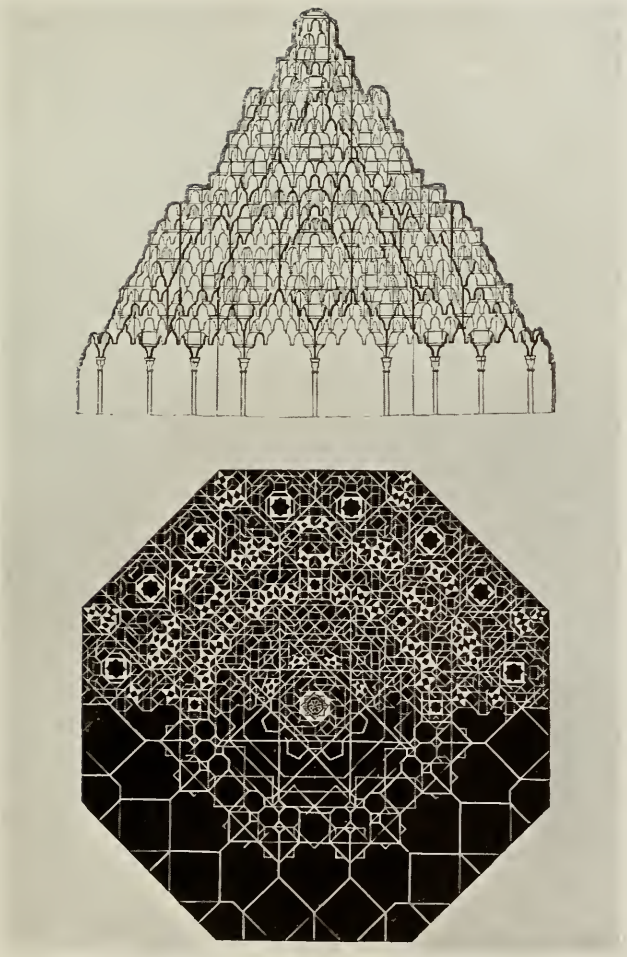
Grecian sense of beauty. But the Roman made whatever he borrowed his own. He was Imperial, self assertive, *aimant un peu le tapage,* and not a little vulgar. Decoration, which with the Etruscans and Greeks was kept within bounds, in Latium became a positive obsession. Blank spaces were held in horror, and were plastered over with a luxuriance that often became a riot. It has been said that under the Empire the "ceiling appeared like an Italian garden suspended overhead, roses and flowers combined with masks, shells, cornucopias, eagles, grotesques and scrolls." As a matter of fact, not only was the whole universe called in to minister to the Roman's love of display, not only did he ransack heaven and earth, the sea and all that is therein, he plumbed the most secret recesses of the imagination afire with a vastly enveloping, cosmopolitan cosmogony in order to enrich his treasury of decorative motives. His fertile fancy produced wonderful results, often overwhelming in the mass, though very near the sublime in many details. If in the ruins of Pompeii and Herculaneum, the

records of those wonders which adorned the Domus 'Aurea, and the baths of Diocletian, we find floral scrolls blossoming out into human heads, twisting about weirdly until they merge into birds and beasts; if brutish and vegetal men hob-nob with humanised animals, all endowed with an impishness that places them in a different category to the calmly unreal symbolism of Egypt, we are also confronted with the very real beauties of the geometrical work and its accompaniment of rope and ribbon tracery, and the restrained translation of flowers and leaves into purely decorative forms.

CHAPTER III

THE BYZANTINE AND THE MAURESQUE

It is curious to see how Byzantine art arose. Naturally enough Byzantium, a colony on the confines of Europe and Asia, and the very gateway of a great East and West route, successively in the hands of the Megarians, Medes, Athenians, Spartans, Macedonians, and Romans, presenting a hot-bed for a composite art. But when Constantine rebuilt sacked and devastated Byzantium, dedicating a new city on a Christian basis, it was essentially Latin in architecture and art. Even when Theodosius divided the Empire in A.D. 395, and made Byantium the seat of the Eastern half, public and domestic buildings were of the Roman type. However, the profound disturbance caused by the acceptance of Christianity, the constant influx of Asiatics, gradually had its influence. And so we see, chiefly by



Plan and elevation, Hall of the Two Sisters, Alhambra.

means of ancient illuminated manuscripts, how the composite gradually crystalised.

Byzantine architecture combined elements of the Greek, Roman and Asiatic are, united, we may justly say transmogrified by Christian sentiment. The result was a strongly virile style, possessing striking beauties and capable of influencing widely different races, moulding much of the structural work and more of the decoration of medieval Europe, and in turn producing that prolific source of fine performance and fertile inspiration, the Arabesque or Mauresque. It was a style of smooth, rounded surfaces. Of classic achievement the Roman rounded arch was retained, but the entablature discarded; circular rather than flat cupolas became prominent features. We feel that we are witnessing the Eastern mind working its will on Latin thought.

This applies equally to details, notably so as to decoration. With flat timbered roofs and stuccoed coved or barrel vaults replaced by rounded vaults, pendentives reaching low down, a broad intrados marking each arch, flat ceilings and other

smooth spaces presenting themslves to the eye, and little or no carving, there yet existed a lively desire for ornament and a keen appreciation of its fitting application.

A gorgeous ritual and a riotous display of brilliant colours in nature fostered a love for polychromatic decoration, both painting and incrustation of the flat and rounded surfaces with marbles and vitrified substances being used. Of the pomp and splendour of mosaic art we speak elsewhere. But we may remark that the fullest use was made of the brilliance both in tints and in scintillating effects of polished marbles and lustrous glass. These embellishments were applied to the surface as an enrichment both inside and out of an otherwise plain structure. Sometimes the decorations appear in a mass covering extensive vaulted ceilings, in other cases we find the use of mere bands or panels : a series of ovals in the cupola, a shimmering glory of floral tracery or geometrical patterns on the broad under surfaces of arches, or thin bands emphasise their outlines, or are carried from end to end of an edifice, while long or square

panels are placed over windows and doorways. Even columns bear polychrome bands, placed vertically or rising in graceful spirals. It is the art of inlaying carried out with a studied regard to effect, combined was this judicious admission of light through small apertures placed high up, the slanting beams gradually revealing half-concealed beauties, which gives a gorgeousness and mystery quite indescribable. The designs, floral and geometrical, are carried out in bright primary and secondary colours, with an unsparing use of gold. Floral forms are built up of little cubes, but are often given a flowing, involved outline. Indeed, the Byzantines retained a great liking for the Greek flowing lines, though their flat scroll and ribbon work reminds us more of the Egyptian and Celtic traceries, but flattened out as we afterwards see it in the plaster strapwork of the Tudor period.

The religious feeling was against the employment of the human figure for purely decorative accessories, and even birds and beasts and fishes are rarely introduced except as prominent symbols.

On the other hand, pictures were an integral part of the decorative scheme, and are seen as great panels and small medallions.

The drawing both of figures and floral ornaments is usually exceedingly crude if close scrutiny is attempted, but most effective when viewed from a distance, as the artists intended they should be. It is surface treatment, with little attempt at perspective, and none of foreshortening, yet the vividly coloured figures, though so flat and angular, seem to stand out with startling realism from a shimmering background of broken-up gold. We must not, however, fall into the error of thinking that Byzantine art ceased to exist as a living force in 1204, the very definite date given by makers of reference books. It exerted its influence long after that in Central Europe, is to-day a very real source of power and beauty wherever the Greek Church has sway, witness the Balkan States and Holy Russia. The old MSS. already mentioned show that the style of domestic ornamentation differed not at all from that in the churches. And

so it is to-day. The Imperial apartments in the Kremlin at Moscow, with its low vaulted ceilings and deep spandrels, are decorated with pictures of Emperors having all the devotional feeling, the processional grouping of saints in the churches. Some of the churches are as thickly encrusted with scrolls and miniatures as the best work in Italian sacred buildings, and the flowing floral painting covering the whole surface, though more open in design, differs little from that to be seen in cathedrals.

Mauresque or Saracenic decorative art is of importance as imposing itself on the Mohammedan world, with a by no means slight reflex action on both European and Eastern practice. It is said to have been derived from the Byzantine, being a surface style built up of fragments, prisms replacing the small cubes of the artists in mosaic. It is founded on three elements: geometry, flora and script. At its purest even floral forms are subject to the influence of religious feeling and are conventionalised almost out of recognition, in obedience to the law that created things

should not be represented. Exceptions to this rule are found, usually as the result of local influence, for instance, the universal Mohammedan star and crescent moon, which the Turks took from the Byzantines, who had derived them from the Magi of Babylonia and Persia; the eagles and hawks of certain Arab tribes; and the interlaced serpents seen on the archi-vaults of the fortress palace at Aleppo, all suggestive of sun worship; the peacock of Persia; the open hand with key in palm and the lions of the Spanish Moors.

The Alhambra, besides giving us examples of the open hand and lions, also furnishes us with two very remarkable pictorial ceilings in the Hall of Justice. There are three large panels representing three crowded groups of people and animals. In the first we see the learned men sitting in a Court of Justice; the second gives us a hunting scene in two sections, one showing Moors and the other Christians; the third, battle scenes, in which both Moors and Christians are depicted, the former being, in the main, victors. These pictures were first drawn

in outline with bright colours, then filled in with vivid flat tints, without shadows, and are painted on skins of animals, covered with a fine coat of gypsum. The backgrounds are golden, and the ornaments round the paintings, stars, scrolls, and so on, are in relief and gilt. These are, however, exceptions; and it is the prohibitory sentiment which deprived the designs of all aid from pictorial effects and drove them back on geometry, a science that had been studied of old by the religious soothsayer and the builder. Speaking broadly, Mauresque decorative art is an art of the surface. The architectural forms are mainly flat and rounded, though we have vaulting and the peculiar pointed, incurved arch, a combination of the horseshoe and the ogee, and, again, the multifoil arch, composed of a series of half-moons.

Three methods of applying decoration are adopted, painting on the flat, incrusting design in mosaic, and building up design on the flat surfaces with cubes, so that they project. In painting on the flat and mosaic (the two are often combined)

geometrical forms : triangles, rectangles, ovals and their component parts are used, together with involved line tracery, some few simple floral motives and script. Very effective results are obtained with long bands of Arabic script, or elaborate monograms and short sentences placed in panels. With purely African designs single blossoms, star shapes and the single rose type are seen, but going eastward as Asiatic influence predominates, foliage, though conventionalised is more elaborate, and is seen to flow from a single stem. However complicated the design, the twining tendrils can be traced back to the stem. This is characteristic of the tree symbols of Assyria and the Semitic people, the many branched tree of life, seen in the quaint palmated forms of Egypt and Babylonia, the seven-branched candlestick of the Jews, the genealogical tree of Jesse and the vine of Christianity. Much of the mosaic work is very beautiful, as we shall see later on.

Most striking and original, however, is the built-up method, whereby great charm and endless variety are obtained by very simple means, although the round and oval

forms and flowing tracery have necessarily to be discarded. Prisms of plaster are to the Mauresque decorator what wood is to the carver, stone to the sculptor, and plaster to the modeller, a medium for giving expression to thought. These prisms are square or long rectangular cubes, right angles and isosceles triangles, the latter also being doubled. It will be readily understood that by using these as a child uses a box of bricks, with an addition of an adhesive substance, an endless diversity of designs can be obtained, for one piece may be combined with any other piece by any one of its sides. As Owen Jones says, the system enables combinations to be made "as various as the melodies which may be produced from the seven notes of the musical scale. With these stalactite plaster bricks they formed cornices, arches, domes and pendants with the greatest facility." Another available resource is the niche, chiefly of service in building up domes and vaulted ceilings, where we see a succession of deep depressions, like the sections of a series of hollow rounded cones. It is said that this built-up method

originated in the Byzantine mosaics, the cubes of which gave the first idea of strongly projecting incrustations. Be that as it may, it is curious to find the rough stalactite used by Mauresque decorators, while many of the predominating forms are strangely suggestive of local models; for instance, the palm tree with its geometrical scars left by fallen leaves and its built-up bunch of dates, and its crown of drooping fronds, forming a natural canopy; the vine also with built-up inverted pyramid of grapes, just as the vivid dabs of red and yellow in a mass of blue or green suggest those gorgeous waxen blooms of the oleander, the cacti and fleshy leaved creepers peculiar to the sun-scorched plains and unhospitable rocky regions.

It is remarkable, too, that the strong pure colours (tertiaries are but sparingly mingled in the artist's palette) are employed on a principle conformable to nature's own teaching. We have the primaries above, the secondaries below, and so we gain an impression of fairy airiness, although we are dealing with an

agglomeration of angular solids. A Mauresque interior, therefore, even when the sunrays are largely excluded, remains light, and its beauties are revealed by flashes from a thousand reduplicated facets pleasingly outlined, brilliantly hued. The completed whole differs vastly in feeling and effect from the sombreness of the Romanesque as we see it in the gemmed but dark Spanish churches, from the solemnity of the Gothic in its sublime aspirations, the mystery of the Byzantine with its solidity and half-concealed enrichments.

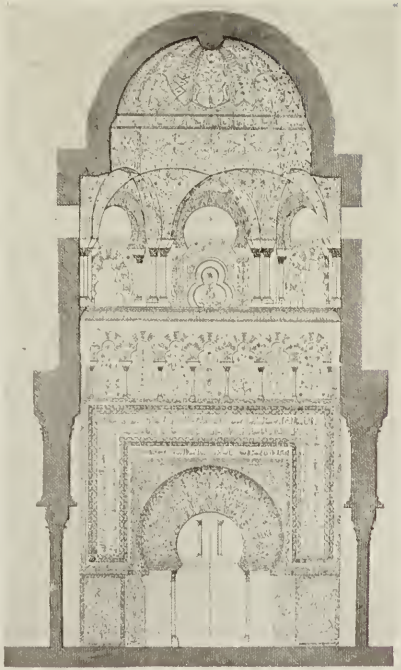
No less an authority than Violet le Duc, speaking of the geometrical foundation of Arabic decorative art, says that while it is self-contained and complete, it is devoid of natural symbolism or expression of an ideal; the inspiration is abstract and the execution devoid of plasticity. Surely an astounding judgment when we remember the glories of the Alhambra, of certain splendid buildings on the northern littoral of Africa, of the best work in Constantinople, and much of that in Persia. With all its rigid formality it gives a wide range of expression, in which natural symbolism

has a real influence. Though the medium be solid prisms and concave blocks, the plasticity is marvellously achieved, as is demonstrated not so much in the varied outlines of arches, but in endless changes in corbelling; in the flat, domed and irregular outlined ceilings; one mass of pendants differing as widely in form and proportion as anything in nature can do. That the Mauresque decorative style has living elements in it is proved by its pliability, its adaptability to local needs as it conquers new regions and races, without losing its fundamental peculiarities. We must always remember, too, in speaking of Mauresque decorative art that it consists of three elements: colour applied to flat surfaces, flat incrustation, and the built-up projection incrustation, any two of which, or all three, may be combined.

Wyatt cites the dome of the tomb of Selim I., at Constantinople, as the most perfect example of the Turkish phase of Mauresque. There are great white curves, foliated to some degree, combined with knots, picked out with black on a red background, the whole design being unified by

the great central star of sixteen points formed by a series of triangles. Contrast this simplicity with the great mosque at Cordova, with its low-vaulted ceiling, its crescent arches of red and white bands, supported by 850 columns, all alike in general form, but differing in detailed ornamentation, colour, and material. It is a forest of red, purple, green, and white columns arched over in all directions, an ordered maze, in which one hardly knows whether to admire most, the entrancing chromatic scheme or the impression conveyed of endless vistas, turn whithersoever you may. Before this gem was ruthlessly dealt with by his vandalic majesty, Charles V., all these vistas converged on the Mihrab, which was one mass of gorgeous arabesques. At the Alhambra, again, we wander from one wonder to another. Consider the Court of Lions, with its ranges of slim columns, placed singly, or in sets of two and three, their decorated capitals supporting tall, narrow arches, merging into a mass of scalloped beauty of red and gold, with occasional tints of blue and green, so suggestive of an African

orchard ablaze with blooms and luscious fruits; while in the Hall of the Abencerrages our vision is lost aloft in splendid groups of pendant stalactites which cover every inch of space. In the Hall of the Two Sisters no less than 5,000 plaster cubes, projecting considerably and merely backed by a few reeds, enter into the elaborate composition of the ceiling. At Toledo we have the white colonnade in Santa Maria la Blanca, with its three rows of heavy octagonal white columns, blue incrusted bases, intricately voluted gold capitals supporting white horseshoe arches, and above a mass of gold tracery on blue. Pascal Coste describes the Mosque of Meshjed-i-Shah, Ispahan (built towards the end of the sixteenth century and beginning of the seventeenth), where the enormous building, with its vaulted ceilings and cupolas, is one mass of decoration, partly flat and partly projecting incrustations. The predominating colours are turquoise blue and lapis lazuli. The whole surface is covered with small glazed bricks, either self coloured or ornamented with delicate tracery. With these bricks



The Mihrah, Cordova Cathedral.

Mosque of Moshjed-i-Shah, Ispahan.

very complicated designs are worked out. Though the general colouring is a blend of blues, whites, pale green, bright red and buff are also used but sparingly, the reds especially appearing in thin broken lines or little dots like a flame-coloured star in a blue firmament, or a glaring flower amidst green foliage. Buff is rather unexpectedly used in masses, occasionally in the sides of cupolas. Although blue is again the prevailing colour, a very different effect is realised at Pavilion of the Eight Doors of Paradise which Fetteh Ali Shah built for his eight favourites at Ispahan (latter part of the eighteenth century). Here the tall octagonal cupola, with its eight great arches is built up, tier upon tier, with eight alcoves, the whole being a mass of niches of considerable size.

Girault de Prangey speaks of ceilings of wood with incrusted decorations in the Alcazar at Cordova, while Bourgoin has preserved a coloured reproduction of a most interesting flat ceiling from Cairo. His brief description reads thus : *"Plafond á Solive apparentes, en troncs de palmiers, recouvers d'une envelope de planches*

decoupés." The palm-tree beams are recessed in the framing of planks, and in these deep square caissons are cut. The framing runs right round the long ceiling, with two broad bands separating the three longitudinally laid beams. The end cross pieces and the longitudinal strips for about a quarter of the length are painted bright red and ornamented with buff floral designs sparingly gemmed with white and turquoise blue. The remainder of the plank framing is painted a darker blue with gold arabesques. The beams are gilded and covered thickly with blue arabesques. The caissons are blue with gold arabesques, gemmed with white and red. It is a daring constructional and decorative scheme, marked by a rich elegance racy of the soil, which has given us the polychromatic enamelling of ancient Egypt and religions characterised by the weird imaginings of the King-gods and Priest-kings of old and of the Koran. Does it not add to our appreciation of this perfect piece of work when we know that the ceiling was not designed to adorn a palace or a dwelling of some wealthy member of the community,

but to cover in a public fountain, for the edification of the whole community? To give water to the thirsty in this parched land is an act of humanity in conformity with the religious sentiments of the people, and in a sense a fountain becomes a shrine. The ceiling of the Ibn-Touloun mosque in Egypt, figured by Girault de Prangey, shows exposed beams covered with carved panels, both large and small, on soffits and sides.

This reminds us of certain Chinese ceilings described by Ferguson. The Chinese scheme of colouring is akin to the Saracenic. Light blue is used for the predominant colour of upper decorations. For instance, their roofs are covered with glazed blue tiles, their ceilings are blue, except in Imperial buildings, where the sacred yellow replaces the cerulean hue. Green is used for the friezes, red for the pillars, with gold for the tracery designs. Ferguson says: "As a rule the halls are ceiled above the tie-beams, the ceiling being divided into coffers; more importance is given to the central bay, which is sunk into deep coffers with bracket friezes

round them. Some of the walls are covered with open timber roofs, in which the unwrought rafters covering the roof contrast with the elaborate painting and gilding of the columns and the heavy superimposed beams of the roof." Certainly, the first part of this paragraph describes a constructional and decorative method very similar to that adopted in the Cairo ceiling.

Bourgoin's example of the more commonplace flat ceilings from round about Cairo ornamented with polygonals and cubes, painted on flat, show the endless designs that can be produced by these geometrical figures alone, or supplemented by knots and tracery. We find ceilings one mass of red picked out with gold or black. Blue and yellow are employed in the same way. At other times, in place of massing the colours, we see them broken up by the intermingling of smaller figures. In these simple forms we find the basic expression of a system betraying a mentality very different from our own, but of the grandeur of this ordered method we have no doubt, for in it are these re-

vealing tracings, while the genius and idealism of its founders is manifested in its far-spread elaborations.

In considering Mauresque art as mainly a matter of surface decoration we must not forget that the whole Saracenic school displays a true mastery in a well-defined field of woodwork. Wood is treated after the same manner as plaster prisms, so far as material is concerned, but with a very different aim and effect. It is cut up into narrow strips of varying length, usually straight, though occasionally curved, and rectangular in section. With these strips, pieced together and dovetailed, wonderful pierced panels of geometrical and floral patterns are produced, fitting into flat frames with inner borders of little round balls, cubes, and pyramids. Such panels are habitually placed in window spaces, like the pierced tracery stone window panels of the Byzantines, to be seen not only in Eastern but in Italian churches. The Arab copies from these, or perhaps from Indian and Chinese examples, reaching them by way of Persia, but substituting wood or plaster for the marble

and other stone. Some of the finest specimens of these were put up in the tomb of the Caliphs at Cairo. As for the wood tracery panels, these were placed in windows flat, or with the aid of smaller side, top, and bottom panels forming into projecting casements. They are also used as screens above arches, reaching to the ceiling, adding to the intricacy of light and colour effects overhead. Then again, while over timber roof work is rare with them, beams are sometimes worked into a scheme of decoration, as we see above; but boarded ceilings not only form the foundation for the built-up pendant, the panels are covered with a smooth coating of plaster, or the boards themselves painted with all the elaboration of geometrical science.

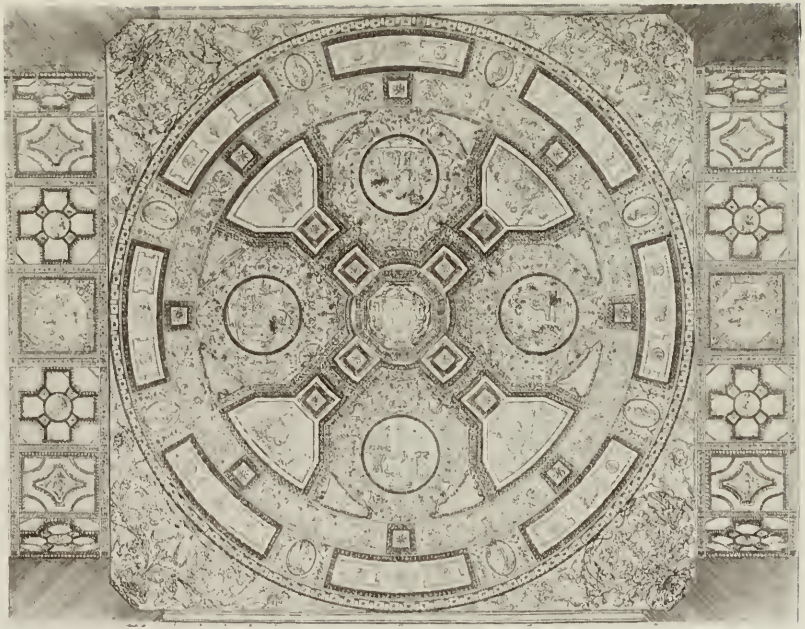
We have mentioned the great care bestowed on the problems of natural lighting. There can be no doubt that both the Byzantine and the Mauresque schools handled sunlight as they did colour, with a conscious art aim. The Byzantines filled their comparatively small windows, deepset in the walls, with richly coloured

glass, or with pierced tracery stone slabs; the Moors had pierced tracery plastered panels, and the whole Saracenic school pierced wood panels. Often the piercing was given an oblique trend, either upwards or downwards, so that the light could be trained to fall as desired. The same principle was utilised even more boldly in lighting their cupolas. Outside are a number of small holes and slits, so cautiously made that they are confounded with the surface traceries. But these orifices enlarged gradually as they are carried through the mass of the wall, either in a horizontal line or upward, downward or sideways slant, and finally, as they enlarge on the inner face of the cupola, they expand into beautiful forms, wide-rayed stars, octagon and foliated designs all outlined in colour or gold. Usually the outer opening is glazed with coloured glass. Thus with these spreading pencils of pure white and tinted light they bring this feature into relief, allow others to remain half veiled from view, the planets and stars in the firmament being called in to add ever changing beauties to the chromatic poem.

CHAPTER IV

MOSAICS

MAN'S earliest attempts at decoration were by the incised method applied to the walls of his cave, as well as the sides of the great monolithic stones he used in worship, which he adorned with dots, rings, circular cup-like hollows and curving lines. But when mud walls began to be built, frequently with courses of stone or wattle-work peeping out, the desire to ornament them with bands of shells, patches of coloured stones stuck in the soft material (just as we see to this day in the flint-faced cottages of East Anglia) must have been irresistible. It is probably in this way that the art of using small pieces of contrastingly coloured stone, bedded in the surface of a building in order to produce a pattern, originated. At all events, speci-



Vaulted Ceiling, Farnesina Palace. Raphael.

mens of this style, even of a refined character, go back to remote periods in Egypt, and Layard found ivory and gold tesseræ in Nimroud.

Pliny, mentioning the use of mosaics in Rome, says that Scylax first introduced "stone-laid work" about 80 B.C. It rapidly spread, and from the time of Constantine the Great (A.D. 320) onward the art assumed enormous importance, both on account of the frequency with which its aid was sought in embellishing public and private buildings, and the high perfection in design and execution to which it was brought.

Of the making of mosaics, as we have said, there are, if not endless, certainly many ways. If the Egyptians and Assyrians employed small regularly shaped cubes, in Rome and other places squares and oblongs, triangular and circular pieces, pentagons, hexagons, octagons and other geometrical figures were called into service, and much effective work was accomplished with small and large irregularly shaped pieces. Moreover, the contrasting materials differed widely both

as regards periods and locality. We find the Romans adorning the vaults and ceilings of the Baths of Caracalla with plain black and white mosaics. In some cases the ceiling was framed round with lines and foliage, then the whole surface divided up into big oblong panels with intersecting small circles and squares, the oblongs containing coarsely drawn gigantic figures of athletes very spirited in appearance, the smaller panels filled in with laurel wreaths, a discus or other article used in the circus and training school. Such simple contrasts scarcely satisfied the taste for luxury, and so both large and small tesseræ of coloured marbles, alabaster, and other costly stones rapidly came into fashion and long remained popular, though component parts often differed according to locality. This adaptation of materials close at hand for decorative purposes is quaintly and strikingly illustrative in the volcanic mosaics. In these cases, lava of different shades is cut into thin slabs, divided into cubes, or broken up into irregular fragments, the fine grained surface being highly polished, and then,

imbedded in plaster, elaborate designs produced. Perhaps the best specimens of this style are to be seen on the Duomo and great cloisters of Monreale in Sicily, constructed out of lava belched forth from Etna and brought in a molten flood to the very hands of the designers. Other notable examples are to be seen in the churches of Amalfi and Ravello from the lava cast out from Vesuvius, and in those of the puy-du-Dome from material deposited in past ages by long since extinct craters. Another school, that of the Easternised Greeks of Byzantium, fired by the sensuous glories of Asia, added glass as a predominating material, thus introducing the most vivid colours, scintillating effects, and the marvellous foil of gold beneath clear or tinted vitrious glazes. A variation on this is introduced with the use of small self-coloured glazed tiles, or tiles decorated with filigree patterns.

Ciampini, who has probably written most fully and learnedly upon the subject, divides the art of mosaic into four great classes. Tessellatum consists of small cubes of marble $\frac{3}{4}$in. square (tesseræ),

usually black and white and worked into geometrical patterns, and sectile is composed of slices of marble (sectilia), generally employed to produce broad effects, rarely for elaborate subjects. Both of these, our author puts down as pavement work. But, as we have seen, black and white mosaics were used in the vaulted roofs of the Baths of Caracalla. The third class is figilnum, known in Italy as lavoro di smalto, fictile work, composed of very small fragments of a compound of silica and alumina, coloured by oxides, and, of course, produced in the glass-maker's furnace. In this way, any colour can be obtained, with great brilliance and softness. This is used on walls and vaulted spaces. Vermiculatum is a mixture of cubes of coloured marbles (figilnum), gold beneath enamel, and even precious stones employed to produce complete pictures, with human figures, animals, plants and so on in their natural colour. This, too, is for adorning walls and ceilings. A fifth class is the opus Grecanicum, consisting of incrustation in grooves cut in white marble, or other

stone, of tiny cubes of coloured and gilded smalto, together with cubes of serpentine, porphyry and other costly materials. It is usually handled to produce conventional and geometrical designs, in thin ribbons, broad bands or smallish panels, outlining the semi-circle of an arch, or embellishing its intrados, ringing the capital of a pillar, emphasising a window or lending colour and distinction wherever most needed. Opus Grecanicum was used to outline the entablature, arches and capitals at San Lorenza-fuori-Mura, Rome, while in the cloisters of San Giovanni Laterano the variously shaped columns—circular, octagonal and twisted—are adorned with this form of mosaic in vertical bands or in spirals.

As regards style, the Roman mosaics were employed chiefly in carrying out geometrical and conventional designs, though natural objects were by no means excluded, as we see by the above mentioned athletes, and as we know from that chained house dog, "Cave Canum," found at Pompeii and reproduced in all kinds of materials *ad nauseam* for many

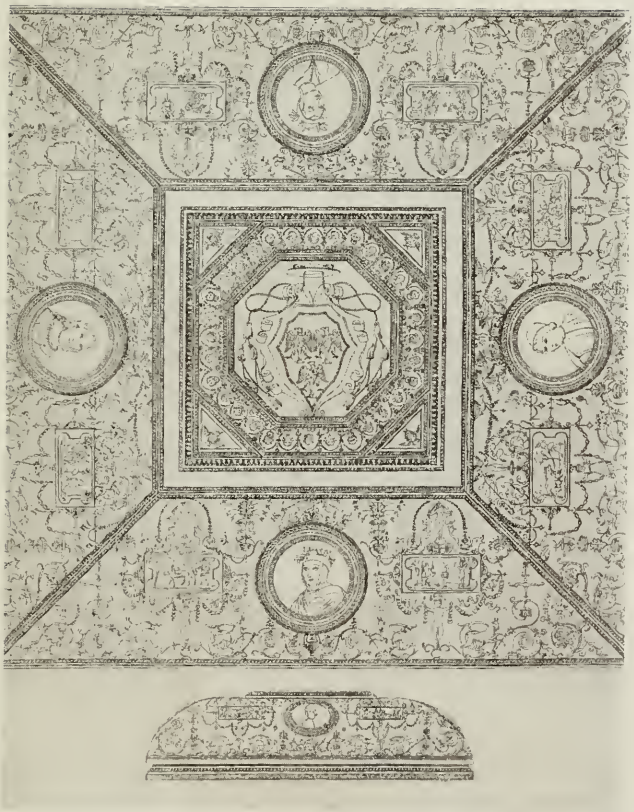
years past. In the early days their first work seems to have been reserved for pavements, and also for conventional mural and vault decoration. When natural objects were attempted, coarse work is the rule, as this appears to be most effective when seen at a distance, more especially when placed at a considerable height. Serlio gives reproductions of some very fine, exquisitely conceived mosaics from the temple of Bacchus and the Baths of Diocletian, which was mixed with carved stone and stucco work in the vaults.

Originally Byzantine work had strong traces of the Roman and Grecian love of conventional incidental decoration, though expanding in the luxuriancy of the Orient. Nevertheless the religious sentiment prevailed, and the Byzantine artists in mosaics also set the law in this for the whole of medieval Europe, and employed their art largely to depict natural objects suitable to adorn their basilicas. The rich cubes are imbedded in cement covering the walls and vaults. Pictures usually have a background of gold tesseræ, and are elaborately framed with

conventional line or foliated designs. Specimens of this work are to be seen almost all over Europe, but the best adorned are the Cathedral of San Marco and other churches in Venice, where the art was carried to a pitch of perfection. In Sicily, and certain Southern Italian towns, the Byzantine mosaics have a peculiar character, apparently influenced by Saracenic taste. Wonderful specimens are to be seen in the Cathedral of Monreale, near Palermo, which, with its precincts, is lavishly enriched with mosaics of the polychrome vermiculatum and the monochrome volcanic types. The most celebrated is the half-figure of our Saviour, greatly exceeding life size, shown in the act of benediction in accordance with Roman ritual, which occupies the semi-dome of the apse. Vivid colours are used, and the background is of the characteristic broken gold type. The tesseræ are rather large and of irregular outline.

With the Renaissance freedom was sought from the rich yet austere formalism of Byzantium. Michel Angelo,

Raphael and other foremost artists of the day designed set pictures, and decorative pieces for mosaic work in churches, ecclesiastical and other buildings. They painted in mosaic as they painted in fresco or oils, and if they adopted some of the exuberant grotesques and other accessories from antiquity, they discarded the older style of the Latins of outlining by means of a series of rectangular steps, such as we see in needlework tapestry, a memento of the large square cubes. Very beautiful work was produced under these masters and their successors, in which, however, occasionally naturalism jostles somewhat incongruously with weird arabesque fantasies. Naturalism, however, was not altogether neglected by the men of old; witness the huge spreading vine incrusting the whole vault of the baptistry dedicated by Constantine to Santa Costanza, which stands near the basilica of Sant' Agnesi-fouri-le-Mura. It conveys the idea of a pergola in some monastery or country villa, although amidst its leaves are introduced numerous symbols of Christianity. The vine itself, of course,



Ceiling in Small Gallery, Villa Santi, Rome. Raphael.

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was among the chief of Christian emblems, symbolising the Saviour. This work is a mixture of coarse tesselatum and fine vermiculatum.

The Turks in Constantinople and Asia Minor modestly, but effectively enough, carried on the Byzantine traditions by employing rather large pieces of glazed earthenware. In Persia—where, indeed, mosaic seems to be indigenous, judging from the very ancient, very persistent and commonly used form of decoration on pottery, graven and enamelled metal vessels, stitchery, and so on; the mosaic work is carried out by means of small, highly glazed bricks, with occasional resort to a large piece of faience. The Mauresque style admits both a modified form of the Byzantine fictile, and the use of fairly large tiles impressed with deep cut, very intricate geometrical and knot tracery patterns, these being smeared over with coloured cements, so that a contrasting tracery stands out from the background. Such tiles may be complete in themselves as regards embellishment or form a part of an extended design. The cubes were

made of clay, squeezed into moulds of different shapes, glazed, and then fired (baked). The edges were slightly bevelled to facilitate removal and give a good key.

In India a particular school of mosaic art seems to have had its centre at Agra and Delhi. It is said to be foreign to the country, imported by Italian workers imbued with the Byzantine feeling. If so, the Indians knew how to accept a good thing and make it their own. But there is much in native decoration both of architecture and in the enamelling of metals that suggests a much older origin. Indian mosaic consists of an incrustation of very small pieces of marble, jasper, agate, blood-stone and other precious stones, placed very close together. It is fine work, almost luscious in colouring. The designs are good, but quite Hindu in feeling, with practically no attempt to copy nature, though with an underlying hint sufficient to give animation and to suggest highly conventionalised symbolism. We have historical evidence that the pietra dura work in the Diwan-S'-Aur Hall in the Palace of Delhi was carried out by Austin

of Bordeaux, and here we have a certain admission of birds and figures. In the Taj Mahal the spirit is Asiatic, the spandrels, angles and more important details being incrusted with mosaic in precious stones, arranged in wreaths, scrolls and frets. Indeed, looking at the glowing bands of mosaics, it is difficult not to believe that the root idea of this embellishment is derived from the festal garlanding of persons and shrines with flora of the country. It must be remembered that Indian gardens and forests are green caskets afire with crimson and gold flowers, softened by sky-blue blooms and waxen white petals. Sir George Birdwood, writing of the red silk cotton tree, says he "came upon a grassy glade overhanging the profound forest depths below, and there, at its furthest edge, stood a colossal specimen of this tree, quite fifty feet high, the trunk straight as the mast of some great ammiral, deeply buttressed at its base, and sending out horizontal branches, like the yard-arms of a ship, in whorls of five and seven, gradually tapering to the top, and at this season—the

month of March—leafless, but covered on every branch, in place of green leaves, with huge crimson flowers (by reflected light crimson; by transmitted, the radiant red of a ruby), each from seven to five inches in diameter, and forming in the mass a vast dome-like, symmetrical head that, with the beams of the rising sun striking through it, shone in its splendour of celestial, rosy red like a mountain of rubies." He also speaks of the golden flowered bava, the purple taman, vermilion chrome yellow flowered pulas, the scarlet pangri, all fine trees. Then there are the oleanders and rhododendrons, the roses and jasmines, and hundreds more, both big and little. With all these wonders of nature about them, is not a jewelled style of decoration the most obvious and appropriate, whether on ceilings, on handsome vessels, or personal raiment?

Necessarily, practice in laying mosaics differs rather widely according to the materials used. Indian mosaic, like the riches of vermiculatum, is made up of small pieces, and these are imbedded in the cement so as to form a close jointing, the

aim being to produce an effect of fine embroidery or cloisonné enamelling. Considerable mixture of colours is the rule, although blue, red, or yellow may be the prevailing hue, white and the other colours being placed in small dots here and there to give the jewelled effect.

Tile work also requires careful jointing, but here colour is more mixed.

With mural and ceiling work in Europe of the medieval period, and subsequently, a distinct aim is shown to produce a glowing, animated picture. Colour is used as in ordinary painting, and even shading is admitted. Flatness is redeemed by breaking up of the surface by cubes. No attempt is made to conceal joints by bringing pieces close together or staining the cement stopping. Indeed, perhaps the majority of the best specimens, old and new, are quite coarse in execution. If the mosaics of Chigiana Chapel in Santa Maria del Popolo, those of St Peter's in Rome, and those upon the dome of London's St Paul's (respectively fifteenth and nineteenth century work) be examined, it will

be seen that the jointing is very wide. On the other hand, grouping and drawing are as perfect as they can be. This is right, for they are meant to be looked at from a distance; they are essentially brightening motives in a general scheme of decoration. Now, under these conditions wide jointing and other lack of finish is not seen, indeed, too elaborate a finish would, under certain light conditions, produce the effect of mere flat washes of colour. But the quality of grouping and drawing is easily appreciated from a distance, and some regard to perspective must be paid. The best artists always emphasise drawing by outlining all profiles with a row of tesseræ of the same material and colour as the background. This throws up the figures, while it prevents the outline being broken upon by the horizontal or vertical lines of the background, which would destroy much of the effect.

While mosaic is commonly employed to give brilliancy, to bring light into dark places, it is also exceedingly useful when carefully handled to correct defects of planning and construction. Horizontal lines

give length and breadth, vertical lines give height. This is true whether bands or panels are selected by the designer. Quite happy results may be achieved when decorating a ceiling if this is borne in mind, while for adorning cupolas this method is invaluable. The very structure of mosaic decoration is an aid to training the vision in the way desired, emphasising the general flow of the design This holds good with all schools of mosaic, though, of course, it is most marked when small tesseræ are the medium.

CHAPTER V

GOTHIC CEILINGS

NORTHERN ITALY cradled the Romanesque style, whence sprang the Gothic. In that region of high alps and dense forests there arose during the period of strife and turmoil following the break-up of the Roman Empire a style of architecture which, retaining certain features of classic examples, developed along lines strongly influenced by local surroundings. This Romanesque style gradually travelled north-westwardly across Europe, reaching our shores with Willam I., so becoming known to us as Norman.

It is essentially the child of a dour, fighting age, characterised by heavily built stone walls (though brick, concrete and tiles were also admitted), round-headed windows, doorways and arches, barrel vaults, and, in non-vaulted chambers, by

stout timber work overhead. Much of the ornamentation retained something of the classic designs—the chevron, beakhead, egg and tongue, a little foliage and occasional grotesques—but all reduced to quite a subordinate position. Although in some of the vaulted chambers the groining was excellent as regards sweeping outlines and the severity of ornamentation, the decoration of ceilings at this period calls for little remark.

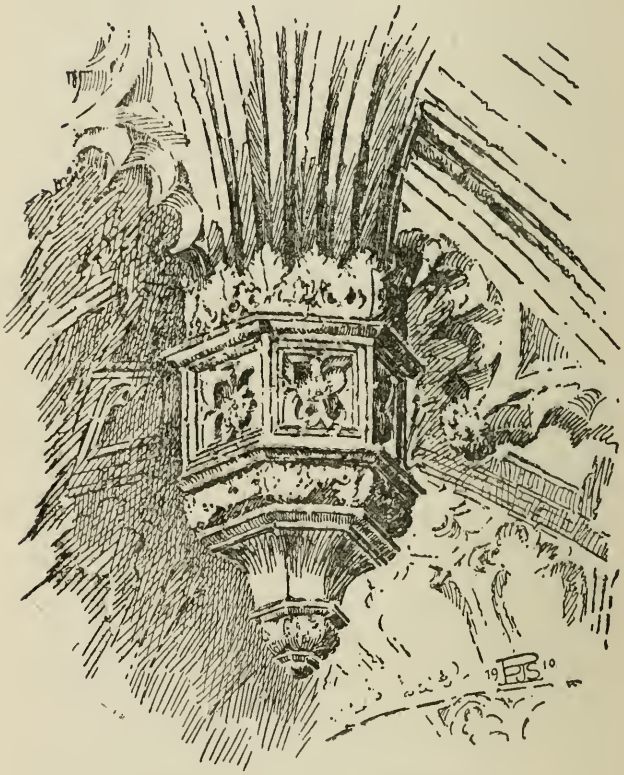
What is important for us to remember is that the Romanesque was merely a step away from the formalism of the Latin type of architecture towards a freer expression of art aspiration, engendered by very different social and spiritual ideals. It was a preparation for the Gothic, and in the various stages of transition we trace a steady development towards an aspiring style, an elaboration in detail separated in character and feeling from classic models. Latin decorative art at its most exuberant period, and in its decline, speaks to us of the superculture of luxurious town dwellers. It betrays the influence of the Roman engineers' geometry, of the

involved tricks dear to the hearts of Latin garden makers.

As we turn to Gothic work, however, we recognise the effort of men face to face with nature, whose caste of mind was moulded by the forest and the countryside in its undressed aspects. It is emphatically the pointed style. Both inside and out the lines end upwards more or less in sweeping curves, diversified with pendants from inner roofs, and ever more and more elaborated finials outside. The windows in the early English period were lancet shaped, tall and narrow, placed singly or grouped, like openings in a wood. And when the windows grew larger some of them took floral forms—trefoils, quarter-foils and rose-petalled—which brings about reinforcement with stone mullions, arranged mostly in geometrical tracery, foliage and branch forms. Indeed, we sometimes see, as in Dorchester Church, Oxfordshire, the mullions elaborated into a regular tree form, the tree of Jesse, springing from the bowels of the recumbent patriarch, its spreading branches blossoming forth with little statuettes representing his posterity.

So it is with the pillars. In the early stages we have slender columns grouped round a more massive central column. The capitals are often subordinated so that the impression is that the column itself branches out in all directions to form the far-reaching groins of the roof. In London we have good examples of this in the round Temple Church (1185), the Guildhall crypt (fifteenth century), with very little decoration; in the Beauchamp Chapel, Warwick (fifteenth century), where the slender columns merge directly into the ribs forming the intricate groining of the roof, the ribs braced by ribs running at right angles and forming pentagons, slightly voluted, but showing considerable reserve in the matter of foliation. In spite of this, however, this rather flat stone roof gives the impression of a network of twining branches, the surface being far more covered than in the other two cases cited. In the Chapel of Henry VII., Westminster Abbey, the ribbing of the stone roof is most elaborate, each rib springing from capitals decorated with foliage. The roof itself is a

mass of tracery, very complex in design, in which circles, squares, octagons and other



PENDANT, WESTMINSTER ABBEY

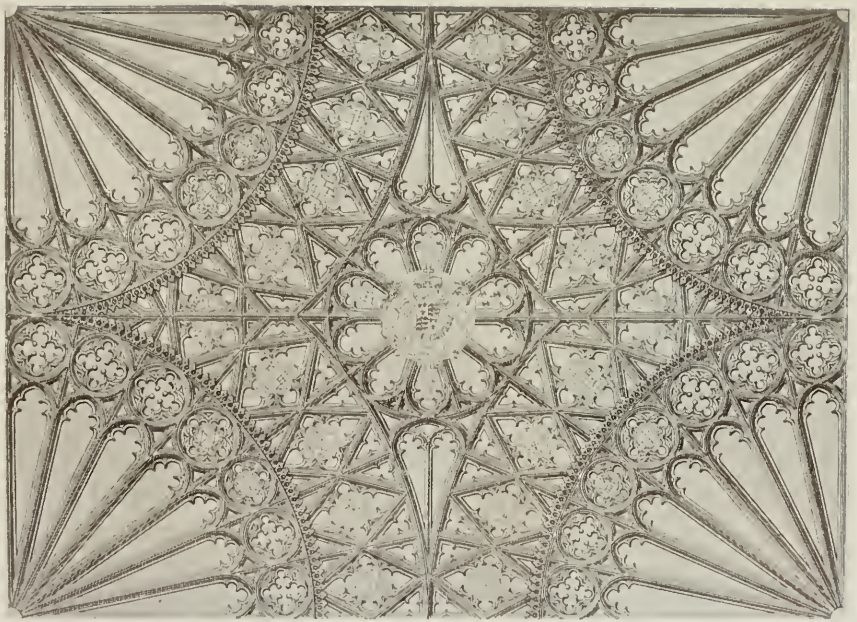
figures appear, with bosses and great pendants at the intersections.

The bosses are well-carved branches of holly, while the pendants are purely archi-

PENDANT, ROSSLYN CHAPEL

tectural in form, only retaining a suggestion of their vegetal ancestry in the way they spring from the ribs adorned with

strawberry leaves, and their circling wreaths of holly. Enormously as Gothic pendants differ from each other, and while far less close to the representation of a bunch of flowers or fruit than the same type of ornament met with in the built-up style of the Mauresque, yet they have obviously grown out of the bosses. Frequently, however, we find them developing into miniature tabernacles, with niches protecting small figures, as in the remarkable example, one of many, from Rosslyn Chapel. As regards the Henry VII. Chapel, the tracery, the eastern end over the founder's tomb is divided into numerous compartments, in which astonishing variations are produced, the tracery here also forming circles, square and other figures. The central point of the scheme is a big pendant, with six others as secondary centres, where the ribs converge. Further modifications are introduced over the nave and oratories. In St George's Chapel, Windsor, the pillars expand into many branches and form over the organ-loft a ribbed ceiling of remarkable intricacy. The tracery consists of a circle



Gothic Tracery, St. George's Chapel, Windsor Castle.

enclosing panels within radiated mouldings, while in the middle are the arms of Henry VIII. and the date 1528, with other arms and badges painted in their proper heraldic colours, and placed within circular and diamond-shaped mouldings. Here, as at Westminster, the scheme of tracery varies from point to point of the lofty elliptical stone ceiling, but right down the middle of the nave there are a series of moderately proportioned pendants, mere protruberances of the converging tracery, like drooping bosses, quite distinct from the elaborate constructional forms we have already described.

Frequently the ribs and groins are deeply moulded. In some cases, as in St Peter's Church, Oxford, we find ribs under the vaulted roof composed of little billets and oblongs, producing a chain-like ornamentation, the links at intersections of groins being small square cartouches decorated with crosses. More commonly, when ribs are decorated, the ornamentation is foliated, either conventionally, as was the rule in the early English period, or distinctly moulded after nature, as in the

decorated style (fourteenth to sixteenth century). The ribs themselves often expand into redaff ornaments, like loops, perforated and adorned with leaves and flowers.

As we have seen, the boss sometimes grew into heavy pendants; but frequently the bunch of flowers or leaves assumed a purely geometric contour, of a rosette, or expanded into a wreath. During the fourteenth century they became very large, and in the course of the two following centuries the flat rosettes were pierced and bordered with ornaments. At other times we find the expansion considerable, a single blossom, a wreath, or a foliated scroll, showing by way of central bloom a figure or small group sculptured in high relief. The corbels supporting the springings of an arch, or the ribs of groined or timbered ceilings where pillars were not used, underwent similar modifications. They were sometimes merely sculptural, at other times decorated with flowers and wreaths, but often amidst these little bouquets, or even on the plain supports, we find faces and figures carved. And here elfish ideas

from sylvan retreats seem to have taken possession of the sculptors, for, as with the gargoyles, and the wood carvings of choir stalls, grotesques are more often found than beautiful forms. It is curious to observe, however, that these grotesques belong to quite a different order of thought than those imagined by the Romans and their imitators of the Renaissance. We do occasionally see vegetables giving birth to a human form, as in that amusing folly from the *lavabo* of Saint Wandrille, or a human being absorbed into the vegetal world, as in that painful mask with pairs of trefoils growing from forehead, lower lip and both ears, which formed a boss in the cathedral of Rouen and is now to be seen in the Museum, a type common enough both in France and England, but as a rule there is a spirit of satire in these sculptures, in which the wielder of the chisel took singular liberties with his superiors, both lay and clerical, and displaying a license startling in a church or its precincts, but far more human in its freakishness than the older type. Hybrids are also there, but these are mostly symbolical, drawn

from those quaint aids to piety, the medieval bestiaries.

Tracing the gradual development of decoration we find in early Gothic an underlying feeling that the forest provides the best building material. This is conveyed more by the general outline than anything else, for the foliage is of the fantastic order. But in the thirteenth century decorators were going direct to nature, and finding their models close at hand. The foliage introduced includes ivy, vine, oak, strawberry, apple, chestnut, fig, parsley, marshmallow, liverwort, holly, plum, chicory, and even the homely celery and cabbage. Then came the black hellebore and sage, followed by the geranium, fern, hawthorn and thistle, with occasional use of aquatic plant leaves. Of course there was considerable variation as to models used at different localities. In York Minster we have a beautiful example of a column gracefully twined about with trailing dog-rose in full bloom. In Rosslyn Chapel we find a splendidly effective use of thistles as a redaff ornament on the bold ribs. Rosslyn Chapel, built towards the

middle of the fifteenth century, is, indeed, unique, for it "combines the solidity of the Norman with the minute decoration of the latest period of the Tudor age." Its walls, built of great stone blocks, appearing nakedly enough, bore a mass of ribs, arches (no less than thirteen varieties), pillars (fourteen dissimilar patterns and decorations), all most lavishly carved, the bold thistle-ornamented ribs blossoming out into heavy pendants, each with their ring of little figures. Peeping down on these from amidst heavy carved bands adorning walls and groined vaults are rows of daring grotesque faces and half lengths, while strings of foliage wind upwards in spirals round columns, or fill the deep vertical flutings on others, and even the pierced foils on cerain arches carry out the same idea of woody thickets.

When thinking of these groined vaults, ribbed stone, and heavily timbered ceilings, it must not be imagined that there was any lack of warmth. Allied with that splendid appreciation of flowing lines was an intense love of homely colour. Just as the Roman itched to cover a vacant space

with ornamentation, so the men of medieval days and their successors applied colour as they would drapery—a comfortable thing, adding completeness and emphasising beauties.

Broadly speaking, in medieval Europe open timbered roofs were succeeded by groined stone, then by arched ribbed roofs followed by flat wooden ceilings. In every case colour was applied with an unfaltering hand. The huge beams and lesser timbers, whether carved or merely roughly shaped with rebated edges and perhaps flutings, were painted and gilded, while the spaces between were filled either with plain boards or pierced panels, occasionally both carved and pierced. Here again colour was used. Primary, secondary and even tertiary colours are employed, but they are bright of their kind. The greys, browns and half tones belong to the period of decadence, the perpendicular, when Gothic had lost its curvilinear spring, and had hardened into a matter of horizontal and vertical lines, decorated with ornaments that appear to be stuck on, not to

Cornice, Bishop Beckington's Shrine, Wells Cathedral.

Groined Ceiling, St. Alban's Abbey

grow out of it. In the earlier days colour was applied in masses, white or blue, picked out with bright tints, enriched with gold; or more elaborate colour schemes were adopted, in which sprigs of flowers appear on the plain background. At other times bold contrasts were sought and with a success in effect that fully justified the daring. Thus we see a curious combination of black, white and red; or elsewhere bright red rafters standing out from the bright blue on the filling boards, powdered with golden stars. These stars may, as at St Mary's and Bury St Edmunds, even have small mirrors let in their centres, to give the twinkling effect in sun or artificial light. Barber poling, the placing of narrow bands of colour, usually black and white, white and green, or red and white, side by side is a favourite method of decoration either on the lean-to roofs of the aisles or winding spirally round timbers, such as rafters, braces and so on. A forcing of the colour note by contrasts of vivid colours and lavish enrichment with gold was the rule over the chancel and

altar. Gold, or its substitute yellow, was employed as a harmonising medium, linking up colours and parts, though also to give greater prominence to niceties of decoration.

Almost the same procedure was pursued when dealing with groined stone vaults and ribbed roofs. Not only were the bosses, pendants and carvings painted, the background was coloured and high relief work gilded. On that curious boss from Rouen Cathedral are traces of green and red paint with touches of gold. Even the ribs and soffits of arches, however, were painted in no stinted manner, for it is here that we see contrasts even more startling than in the blue roof with red rafter mentioned above. There was a cunning jugglery to effect contrast without allowing one colour to predominate over another, and so mouldings of green, red, blue and white jostle one another without hurt, intervening yellow fillets smoothing the whole scheme.

In the boarded ceilings, often found in combination with open timber work—painting became more elaborate. Floral

designs were carried out with much detail. Here and there figures were introduced, generally angels or cherubs.

Some of these colour schemes are so daring that they must be recorded here. In the Clopton Chantry in Long Melford Church, the space between the rafters was painted blue, decorated with gilt lead wavy stars. The rafters are painted red, with scrolls bearing the prayer: "Jhu mercy and granmercy." The cornice is a most elaborate form of barber poling in red and gold, the red beading having a leafy spiral in gold. Between the feet of the rafters shields bearing the Clopton arms impaled with their alliances were shown. The upper cornice as Bishop Beckington's shrine in Wells Cathedral is extremely lavish. The top rounded moulding is barber poled white and black; a red fillet in red, incavo black; a broad flat band top half white and bottom gold; a round fillet red, barber poling in gold and black; a round fillet, a white fillet, a broad flat band in blue carved with vine leaves and grapes, gilded; flat band barber poled white and gold; flat band

red, cavetto painted green with carved gold leaves; a broad rounded moulding with undulating pattern the top white and the lower red; blue round fillet and finally a gold rounded fillet. Another striking combination was that at Palgrave Church Suffolk, where the background of the roof was red, the rafters white with crosses and fern leaves in blue. The purlins were V shaped, the sides being striped black and white, while a thin line of red ran along the apex and bases.

Diapering was a favourite device in Gothic architecture, consisting of small repeat patterns either carved (in stone or wood) or merely painted. The word is supposed to come from Ypres, to represent those square and running patterns seen on damask cloth. Of course, the method is very much older than the word or the special weaving carried on at Ypres. In the main the colour scheme was to place gold and silver (or yellow and white) on colour, and colour on gold or silver. These medieval colourists, however, were good heraldists, and recognised that diapering should be subordinated to the

main decoration, and when this was so, and the diaper consisted of small figures, they often placed gold on white, brown or pink on red, light blue or black on blue. A curious treatment of white or silver was to make the diapering stand out pure by etching the background with minute broken lines and dots. A good example of this can be seen on the diapered shields decorating the tomb of William of Valence, Earl of Pembroke (1296) in St Edmund's Chapel, Westminster Abbey. Another heraldic practice of the decorative painters was counter-changing, that is, having one panel black with white designs, and the next white with black designs. Both red and blue, and red and green, were often counter-changed in this way, generally with a little gold to emphasise details.

Coming now to domestic architecture, we find a far greater and more persistent clinging to timber construction. Apart from the big castles, groined and ribbed ceilings were rare, except in crypts. Open timber work characterised most of the large chambers, boards filling in spaces

between the massive beams. Later, boarded ceilings became the rule in important houses, the beams being mostly concealed.

A good example of this open timber and boarded work is seen in a thirteenth century grange at Swanborough, belonging to Lewes Priory. Its roof is composed of arched timbers, while the horizontal supports of the rafters are moulded, the spaces between the arched ribs being filled with carved boards. The rafter wall plates are battlemented.

CHAPTER VI

THE RENAISSANCE

OBSCURED though it had long been by the conflicting Gothic and Byzantine influences, still traditions of classic architecture lingered in Central and Southern Italy. When, therefore, with the close of the fourteenth century there came about a revival in learning, men turned eagerly to the Greek and Latin authors; they also showed an enthusiastic interest in such monuments of the Augustan age as time had left them. So in Italy the Renaissance in literature was cœval with a revived appreciation of Greco-Roman art. Outside of the peninsula, it was but natural that the twin phases of this great movement should have advanced at a very different rate. Each fresh discovery of an author was quickly heralded abroad, by means of letters and copies, for there was a liberal exchange of treasures and criti-

cisms between *literati* of all nations. Such a rapid diffusion of knowledge of classic architecture and decoration was not such an easy matter. To understand an author required merely the exercise of an intellectual effort, but in order to appreciate fragments of an almost lost body of art, actual inspection was necessary. So while in Italy the close scrutiny and measurement of Roman temples and baths, the too eager collection of statuary, pottery, mosaics and other fragments prompted definite study of old writers dealing with such subjects, and quickened a desire to imitate those wonders of a past age, foreigners had to wait and see. Hence the progress of Renaissance in art was slow, for interchange by travel was then very slow, even on the Continent. As for us, who were scarcely in touch with Italy until some three hundred years later, Renaissance architecture and decoration came to our shores only after a long delay and by devious ways. Indeed, the inspiration came to us in a succession of waves at irregular intervals and of unequal force, often curiously at variance with the actual

condition of affairs at the centre of the movement.

In Italy, at the end of the fourteenth century, all was propitious for a great change. Puissant prelates, emulous courts and no less magnificent princes of commerce had long patronised art in no niggardly spirit. This revival of classic learning found artists and patrons alike adequately equipped for a task both difficult and alluring. That keen sense of proportion which marked the best work of the Greek and Roman master-builders was adopted with such modifications as the requirements of the day suggested. On the rules appertaining to the five orders, as deduced from ancient writers and existing edifices, a neo-classicism was erected, which, in the hands of the early ardent masters, produced great things, though destined to degenerate into fetishism. For even at its best, the Renaissance in architecture was an artificial thing, and therefore, carried within itself the seeds of early decay. What Ruskin said was cruel truth, neo-classicism conducted men's inventive and constructive faculties from the

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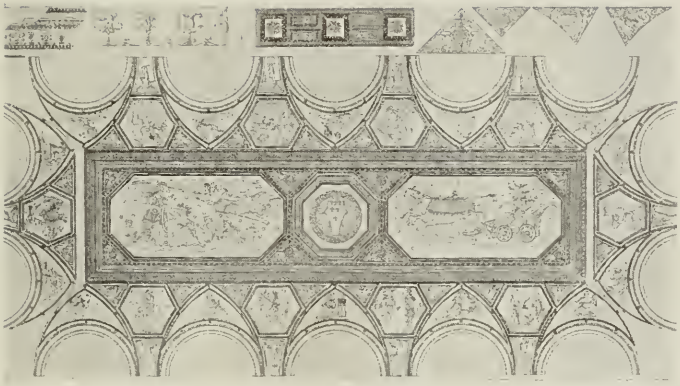
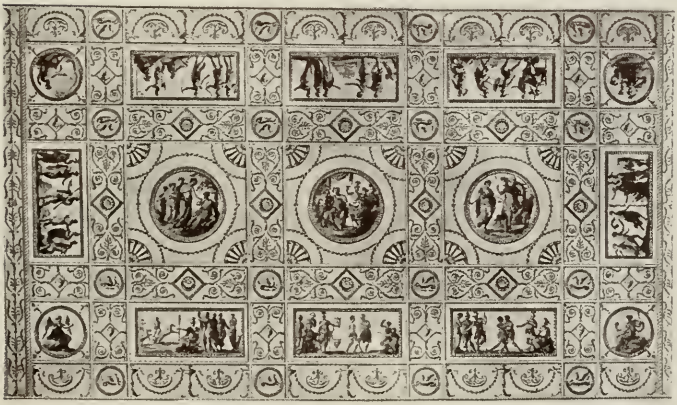
Grand Canal to Gower Street, and those who remember Gower Street a decade or so ago, will realise how deadly the criticism. At its best the Renaissance taught thoroughness, a love of bold lines treated with constraint, and made gay with an abundance of decoration growing out of the parent idea and forming an organic whole with the building.

Raphael and his compeers found the Roman buildings lavishly decorated with a wonderful array of ornaments painted, carved, moulded and incrusted; an ornamentation founded either upon pure geometry or on a curious blend of conventionalised natural forms, naturalistic representations, and the weird children of a cosmopolitan mythology. All of this was very rich, much of it decidedly graceful, and the whole satisfying to those who looked upon the surface treatment as an essential part of right designing and construction. They dipped deeply into this source of inspiration, at times copying boldly, but, generally speaking, spurred on to inventions of their own. We see this work in its most luxuriant form in the



Portico Ceiling. Farnesina Palace, Rome. Raphael.



Painted Plaster Ceiling. Richardson.

decoration of the loggia at the Vatican, carried out or inspired by Raphael, and in what remains to us of the grandeur that once clothed the Villa Madama.

The loggias are a series of galleries, once open but now enclosed with glass, surrounding the *Cortile di San Damaso.* The whole surface of the inner walls, the pillars overlooking the court, and the lofty series of vaults between each couple of columns, are covered with one mass of decoration, forming a framework to the ceiling panels, painted by Raphael and his pupils, with scenes from the Old and New Testaments. Much of the decoration consists of what is known as arabesques, that quaint mixture of subjects mentioned above, united by series of flowing scrolls, mostly bearing buds and scanty leaf forms. The so-called Vitruvian scroll, consisting of a florid spiral scroll, now curling inward to form an ever-narrowing circle, now shooting upwards *en vrilles,* like the spirally twisted tendrils of a vine, were introduced; and, as with their prototypes, these often imprison animal or human forms or heads, which sometimes

actually unite with the semi-vegetable scrolls. Apart from these grotesques there is an endless wealth of flowers and fruits and vegetables, birds, beasts, and fishes, and human figures singly or grouped. One of the vaults presents that favourite subject for artists of that sunny clime—a vine-covered trellis work. The diamond-shaped framework is just visible under a load of vine leaves and grapes, opening up overhead into great gaps, through which, as it were, we see the vivid scriptural pictures. It is noticeable, however, that in most cases, as the ceiling itself is approached, the decoration becomes closely symbolical, figures and ornamentation having a direct bearing on the pictures filling the series of four panels. This elaborate decoration is carried out in slightly raised stucco, carefully painted. It is due to Giovanni da Udine who worked under the guidance of Raphael; but the second middle loggia is by the great master himself. Here, as in practically all the work of the Cinquecento pure colours are used, with a view to produce a light pleasing effect.

At the Villa Madama, which was also planned and embellished under the direction of Raphael, the same lavishness was shown, not an inch of the inner walls being left uncovered either by sculpture, painting, or the painted raised stucco arabesques.

A remarkable peculiarity of this Renaissance decorative work in its hey-day is that the very sense of proportion, which the architect made his ruling law, was curiously neglected. In the ancient decoration as found in the so-called baths of Titus, the Domus Aurea, and later on in the ruins of Pompeii and Herculaneum, in spite of fantastic forms, every part was considered in relation to the whole. This is not so with the neo-classic style. We find the large and small constantly mixed, and a tendency to encourage fantastic conceptions, with the introduction of the incongruous. This fatal facility for running mad was kept within bounds by the geniuses who initiated the movement and their capable immediate disciples, all of whom, working much in churches, ecclesiastical buildings, and royal apart-

ments, were largely inspired by that honoured handmaiden of art—symbolism. This disregard of proportion in decorative detail is all the more peculiar inasmuch as Palladio insisted on exact observance of proportion in architecture. Serlio, too, is very definite in this matter, prescribing small designs with few details in low relief for the ceilings of small low rooms, painted in monochrome (in which opinion he differed from his betters) while demanding more elaborate designs in high relief for high and spacious rooms. He prefers two colours only; or, if many are used, blue to act as a foil. But he is eager for rich cornices. As the influence of the Cinquecento receded, exuberance got out of bounds, leading to overloading and accentuation of eccentricity. While the ancients and cinquecentists showed us plants blossoming forth with human heads, or animal forms sinking into plants, introducing judiciously symbolical masks from store-house of the drama, the later men gave us human heads hanging by the hair and all manner of wonderful little gems stuck on walls, jostling other details

without rhyme or reason. It degenerated into a rage for putting as much work as possible into the legitimate task of covering surfaces. This led to the heavy overloading of the Louis XIV. style. The Romans had used a delightful idea of decorating certain baths and fountains with rocks, fishes, shells and other aquatic forms, and Raphael adopted this with happy results in one of his rooms in the Villa Madama. Inspired with this and the rustic style, the mere imitators fell into mannerism, and produced the rocaille style of Louis XV., in which scrolls and foliage twined over rocks and shells. This speedily developed into that exaggeration known as the rococo, in which we see a profusion and confusion of scrolls, foliage, rock work and animal forms, the product of mental indigestion.

This striving after richness of effect and singularity in the choice of subjects came at quite an early date. We find evidence of this all over Italy. Even the glories of Sansovino in Venice are often cumbered by over emphasis of detail, by overloading generally, leading to many strange

aberrations of his successors. Certainly some of the most magnificent ceilings ever conceived were to be seen in the ducal palace and the library of San Marco. But for all their beautiful purity of colouring, wealth of gilding and exquisite execution they are often far from happy taken as a whole. One of Sansovino's masterpieces in the Palace is the Golden Staircase, a grandly proportioned work on which ornamentation was bestowed with a lavishness thoroughly symbolical of that love of display shown by the representatives of the proud Republic. The vaulted ceiling is a fitting enough crowning to the wonders of the balustrade and walls. In its prime it was a shimmering mass of gold and dainty tints—like a rainbow imprisoned in gossamer goldsmith and filigree work—covering every inch of the stucco mouldings, carried out with superb craftsmanship by Alessandro Vittoria. The elaborately foliated stucco mouldings framed a series of square and octagonal panels joined by boldly sculptured bands, each compartment filled in with painted decoration from the brush of Battista

Franco. It is an arresting vision seen from a distance, mounting or descending, but looked at closely, it is far too oppressive with its too bold moulding, its fatiguing detail laid upon detail. The same is true of that other vaulted ceiling by the same trio in St Mark's Library. There the twenty squares and octagons are joined together by sculptured bands, the splendid framings enclosing little gems from the brushes of Salviati, Zellatti, Battista Franco, Schiavone, Giovanni de Milo, Guilio Licino, and greatest of all, Paul Veronese, the spaces between each panel being covered with charming tracery. Everything is a miracle of beauty by itself; seen as a whole the ceiling lacks unity; it is a collection of fragments; seemingly too heavy for its position; wearisome to contemplate. The truth is, the design was a faulty translation of the deeply elliptical ceilings of ancient Rome. But while the classic coffers or lakes give the impression of being structurally comprehensible, even necessary, their moulded sides as natural as the flowered knot in the centre, the coves being of regular size and

separated merely by their mouldings, the Renaissance imitators forgot all idea of fitness, and merely built up the coves with exaggerated carved framework, because they desired to pile on embellishments. They were gilding the lily, painting the rose, not allowing the lily to unfold its own ivory calyx, the rose to uncurl its glowing petals. Therein lay the canker of the Renaissance: it was not a form born of necessity; it was a mannerism. So with other ceilings within these two celebrated buildings: grandly moulded and carved stucci frame many immortal paintings by the great masters. But it is heavy and wearisome. Elsewhere it became oppressive, not only by reason of mere weight of tortured stucco, but because of the lurid glimpses of unreason shown in the elaboration of the arabesques.

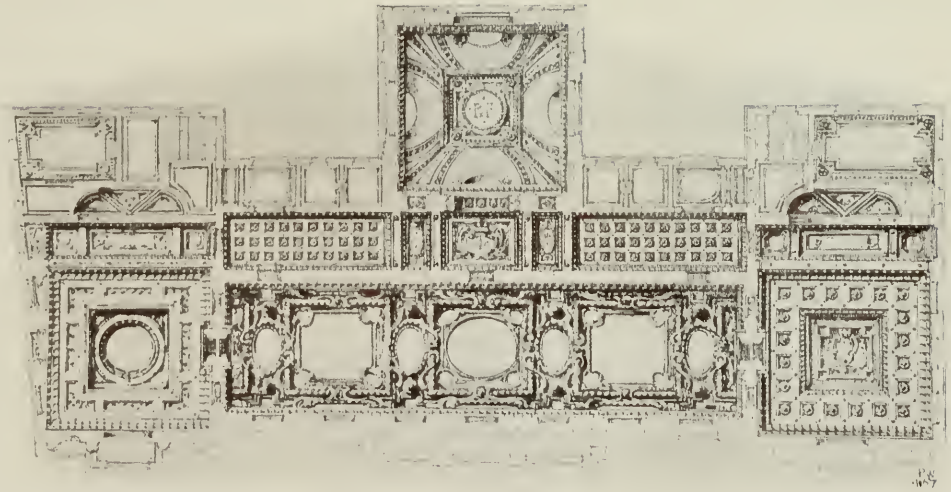
Crossing the frontiers into France we find that the Renaissance quickly received recognition from the great, though it was slow in making general headway under Henry IV. and Louis XIII. In the succeeding reign, however, the style was in full force, and we see its influence at the

Louvre and Versailles. In Gallic hands the Renaissance style lost some of its licentiousness (indeed, there was far less *gauloiseries* in this period than under Gothic sway), but both ponderosity and incongruity increased. It was quite as exuberant as, but less imaginative than the Italian. In fact, it was merely imitative, an imitation of an imitation, and only later gave scope for creative efforts. The rigid, vertical and horizontal lines of the main architecture were nullified by overbalancing of ornamentation. This is particularly noticeable in much of the ceiling work, where the cornices are extraordinarily massive, deeply moulded, and even under-cut, and are duplicated round the ceiling itself, these borders being connected with heavy central panellings by means of bands or scrolls. Bastard heroic painting also came into fashion, the stodgy stucco framing pictures in which we see battles amidst the clouds and the apotheosis of portentous patrons wearing full-bottomed wigs and Roman costume, or the no less unethereal dress of the period. Garlands were much in vogue, but as they

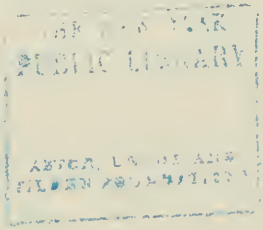
were reduced in length they grew in bulk, so that the swags of this period are semicircles of plaited fruits, flowers and leaves, tapering at the ends and swelling inordinately in the middle. These paunchy collections of vegetable matter, weighing half a hundredweight or so, are carelessly fastened overhead to nothing at all by the flimsiest of ribbon bows, conveying a sense of insecurity that is hardly reposeful. Cornucopias also swell out into Brobdingnagian proportions, are fantastically curled, and let out a veritable flood of the good things vouchsafed not merely by Ceres, Pomona and Flora, but even by Diana and Neptune, for game and fish hang threateningly overhead. With Louis Quinze and Louis Seize a lighter vein was struck. There was a considerable amount of delicate scroll plaster mouldings and flat paintings, light colours, white and gold, betraying the influence of Watteau. This same comic operetta champestre sentiment, however, also suggested the rustic rocaille style, which, as we have seen, degenerated into the rococo with all its absurd medley, inappropriateness and ostentatious enrich-

ment of commonplace objects. The Empire style in its early stages shows the influence of the Republican return to the simplicity of pre-Augustan Rome. It is the day of a rather emasculated classicism, of straight lines, moderate curves, reduced embellishments, and low relief in modelling and sculpture. The heavy garlands and swags are replaced by narrow bands of foliage—oak, occasionally, but more generally bay leaves, olive branches, myrtle—neatly worked into compact masses, the leaves placed in regular lines, with sparse admission of acorns, olives, or tiny blooms—giving the opportunity for light touches of colour and gilding, the whole bound about by narrow ribbons winding spirally and crossing each other. The long palm leaf replaces the spreading acanthus. For ceiling decoration the style lent itself well, so long as restraint was shown. The colouring, while also moderate in tone, had lost the purity of the early Renaissance. The red was no longer frankly that of the pomegranate, but of terra-cotta; the pink no longer that of the rose-leaf, but of dusky cream; the green

no longer that of the laurel, but of the cypress and olive; the blues, too, are milky or inky. Monochrome began its reign; that monochrome introduced in Italy by weaklings, who followed the brave Cinquecento days, who blinked at the glow in which the sun of Raphael and his school was setting. Later, however, a more robust rendering of the classic idea in architecture and decoration prevailed, with a judicious bending to local needs and shedding of overloading, This acclimatised classicism rules to this day practically over a good third of Europe, perhaps not always with the best results, but often enough with some dignity, purposefulness, and happy effects. An example of a latter-day French classic ceiling, devoid of the Renaissance arabesque oppression, is given in plate. It represents the ceilings on the first floor of the Hôtel de Ville of Tours, built by Victor Laloux in the early years of this century. The large coved square is at the rear of the building and placed over the well of the grand staircase. The long strip of deeply covered ceiling is over a



Ceilings, Hotel de Ville, Tours.



corridor, and here M. Laloux has made an effective break to connect the staircase dome with the sumptuous decoration of the reception room. To the right is the Council Chamber, to the left the Salle des Marriages, each provided with a suitable vestibule, deeply coved and leading respectively to a Committee Room and the Mayor's Parlour. The four squares and two ovals outside the coffered corridor are over minor offices. Although somewhat heavy in certain details, especially in the Salle des Fétes, it is a well-conceived ceiling plan, dignified, and providing diversity with a unity worth of a painstaking artist.

One of the results of the Renaissance has been that on the Continent, especially in France and Italy, it is recognised that a flat ceiling if it cannot be adorned with moulded plaster work, at least cannot be left bare. Ceilings are almost always not only colour washed but decorated with more or less ambitious work of the painter. Much of this is of the flimsiest quality, often marked by bad taste. It may be right enough for the ceilings of sleeping apartments to be festooned with curtains

painted in grisaille, looped up by pink or green ribbons, but it is rather disconcerting when these same ribbons are made to support heavy baskets brimming over with flowers the like of which no mundane garden has ever seen, or fruit suggesting dyspepsia. Peeping *amorini* have ousted the elder Romans, they are, however usually quite as much unaccountably lopsided and odd-jointed. There is this much to be said for the modern Continental decorators: they paint pictures on walls, and reserve their ceilings for genuine decorative treatment.

CHAPTER VII

RENAISSANCE IN ENGLAND

Our first glimpse of Renaissance art we owe to Italianised ecclesiastics. Traces of their influence, chiefly in the way of wood carvings, are to be found associated with the reigns of Henry VII. and Henry VIII. Indeed, the latter, before he broke with Rome, delighted to call foreign artists to his Court. Soon, however, politico-religious causes made intercourse with the politer parts of Europe well-nigh impossible, a state of affairs that lasted for many years. While, therefore, traces of the classic style are to be seen at this period curiously mingling with the Gothic, they are few and slight. Times were out of joint, and were scarcely more propitious under the youthful Edward and later his gloomy sister, Mary. With Elizabeth on the

throne, clouds rolled by, once more the Tudor sun in splendour shone forth on a freely breathing, eagerly enterprising people. There was a brave show, much spending of monies by Courtiers in honour of their Peerless Mistress, while an emulation for connoisseurship in art became fashionable. We had begun even under bluff, but erudite King Hal to exploit a particular vein of native literature and art, under his daughter while this was fostered, we also sought some of our learning in perusing French renderings of the classics, and derived some of our art ideas from the Flemings and Dutch. Now, the Renaissance came slow footed to the Low Country, deprived of some of the brightness, of some of the wayward naughtiness as regards decoration, slightly coarsened by its passage through Germany. In the Low Country it was a matter of adaptation rather than of adoption, and when it was imported thence to our shores the formalism of classic lines had been softened, rounded, made somewhat more homely by a fruitful union with the Burgundian Gothic of

those regions. It shaped the Elizabethan, and much more the Jacobean style, in which the Gothic and Classic are made to blend with a brick and mortar symbolisation of a new era, ushering in the rise of the yeomanry and petty gentry, above all of the merchant classes. Feudalism was departing, and a novel sense of ease dawning. It was the age of the comfortable Manor Houses and solid, not unhandsome town dwellings of the successful men of commerce. Often timber roofing gave place to boarded ceiling, carved wood ceilings, and those characteristic plaster ceilings, seen at their best under the last of the Tudors and the first of the Stuarts.

During this period, if decoration included classic lines and geometrical designs, the feeling expressed was native. We have squares, octagons and diamonds and scrolling, all common enough on the Continent, but with us the arrangement of pattern, the strap-work, and more particularly the marked introduction of heraldic devices—whether we have full coats of arms, or badges, crests, mottoes, *cris-de-*

gruerre—was thoroughly English. Even Celtic knotwork was acclimatised by being broadened, made more open and less involved, and almost invariably (though not always) deprived of those queer terminals, the reptilian claws and tails caught in elongated half bird-like, half snake-like jaws, which was so distinctive a feature of the whole school of knotwork, represented by Runic cross carvings and the illuminations of the "Book of Kells" and other manuscripts.

With the advent of the Stuarts travel became more easy to Englishmen, and once more direct communication with Italy was opened up. While James was a pedant, he was a discriminating Mæcenas. He was not slow in appreciating the genius of Inigo Jones, the former carpenter apprentice, whom William, third Earl of Pembroke had sent to Italy in order to perfect his skill as a designer and to give play to his innate taste for ornate gardening. Jones had made the best use of his opportunities while travelling about the peninsula and specially the facilities that his entrée at the Vatican afforded him.

We can still study his small quarto sketch-book filled with minute notes and pen and ink drawings, showing how closely he studied the work of the classic period and the revival. At the Court of James as designer of scenery and machinery for Ben Johnson's masques, no doubt he had opportunities of displaying his admiration for Palladio and his whole-hearted adherence to severe laws of proportion. That ordered style with its suggestion of power and majesty appealed to James, who made his protégé first Surveyor to Prince Henry and then Surveyor General of Works. In both capacities he did much worthy service restoring and adding to Royal Palaces. His most ambitious task was the drawing up of plans for the total reconstruction of Whitehall Palace in the classic style, but the only part he actually carried out was the Banqueting Hall, which later became a Royal Chapel, and is now the United Service Institute Museum. Greatly criticised as this has been, it is only fair to remember that what we have is merely a fragment of a huge Palace, with long water and garden fronts and seven great courts.

It is remarkable that in this as in other pieces of his work, Inigo Jones showed himself in the matter of main design a student of pure Greek forms, careful of proportions, restrained in decoration, except where sculptural pediments and statuary are concerned, but betrays a predilection for the middle Renaissance period in the matter of internal decoration. This is particularly noticeable in his treatment of ceilings. In his friezes the acanthus is developed moderately, garlands are long and slim, not paunchy swags, and the masks are those of Attic Tragedy and Comedy, not the fantastic grotesque of the post Raphael period. On the other hand his ceilings are generally coved and corridors barrel vaulted. He dispenses with deep coffers and uses flat surfaces broken up into squares, oblong and oval panels by means of broad, flat moulded bands, ornamented with rather open running plaited device. In his design for the Whitehall Chapel we see a coved ceiling with shallow coffers ornamented alternately with quatrefoils and cherubs, while at the angles garlands of oak run

up a flat band. The frieze is composed of oak garlands held up by leopard's masks. Jones made good use of both military and heraldic symbols, but generally on his friezes in preference to the ceilings. The large flat ceiling of the Banqueting Hall is divided into nine panels by broad bands adorned with the open plait. There are seven oblong and two square panels. The middle and largest panel contains a great oval, formed by a frame with the plaited device. The inner edges of the panels are decorated with a bead device. These panels were specially devised to frame paintings and are filled with canvases by Rubens. In another typical example, designed for the King's House at Greenwich, Jones had a rather deeply coved ceiling with large circular framed panel, surrounded by four oblongs and four small circles. Here again the flat surface on the bands was adorned with a running open plait design, while the bevelled edges bore beading and plain voluted wave forms, the latter in happy deference to the naval character of this Royal seat. Work very similar in style

by him is to be seen at Rainham, Coleshill, Ford Abbey and elsewhere. He used his plaster in rather heavy masses, but put on the decoration in continuous patterns, treating the moulded plaster to form imposing frames to pictures, not as complete works in themselves, thus differing from the early Renaissance plasterers of this country. As a result of this and the repeat type of patterns, sculpturing in situ as in early periods gave way to the practice of moulding the bands and corner devices, which were afterwards fixed in position, a method also adopted in dealing with cornices and friezes. Both in architecture and decoration Inigo Jones' influence was very great and lasting, but with the exception of his son-in-law disciple, John Webb, few worked on so solid a basis of study and with the ability to express sturdy individuality within strictly defined lines. After him the deadly tendency to formalism asserted itself. Architect and decorator appear constantly at variance, exaggerated and inappropriate ornamentation often accentuating commonplace and faulty design.

This decadence, however, was arrested for a time at first by a reversion under Puritan rule during the Commonwealth to modified forms of Gothic and Jacobean, with all attempts at decoration kept severely in abeyance, and then by the accuracy and taste of Christopher Wren. Both by temperament and training as a mathematician Wren's natural leanings were strongly in favour of classical revival in architecture. Circumstances having early thrown him in the way of putting up public buildings he soon showed what an ardent adherent he was of classic style in all its purity. At the same time he was no slavish imitator of Palladio and the other Italians, boldly daring to differ from Vitruvius himself when circumstances justified departure from prescribed rules, as St Paul's Cathedral bears witness. As a decorator he was far more florid than Inigo Jones, which is clearly seen in his deep, bold friezes and imposing ceilings. He had a love for the foliated scroll work of the early Renaissance workers. He usually employed heavy plaster or carved wood framing above the cornice and round

his panels. This work is assertive, filling up a good deal of space, strongly modelled; even his plaster work is so deeply undercut as to suggest the carver, rather than the modeller. Wren's taste was pure, however, and never led him to use grotesques. Even his arabesques are few, his acanthuses, foliated scroll work, and floral forms although conventionalised are clearly based on nature, and we do not find him blending purely constructional motives with floral growths. Consequently there is a freedom in the flowing character of his decorations that prove a pleasant corrective to the rigidity of vertical and horizontal lines, varied by formal arch curves, of the building ornamented. By way of outlining his heavy framework, he was fond of using the rounded, rope-like garlands of bay leaves, twined round with ribbons, but though these are formal enough, the leaves are so strongly moulded that the design is quite graceful.

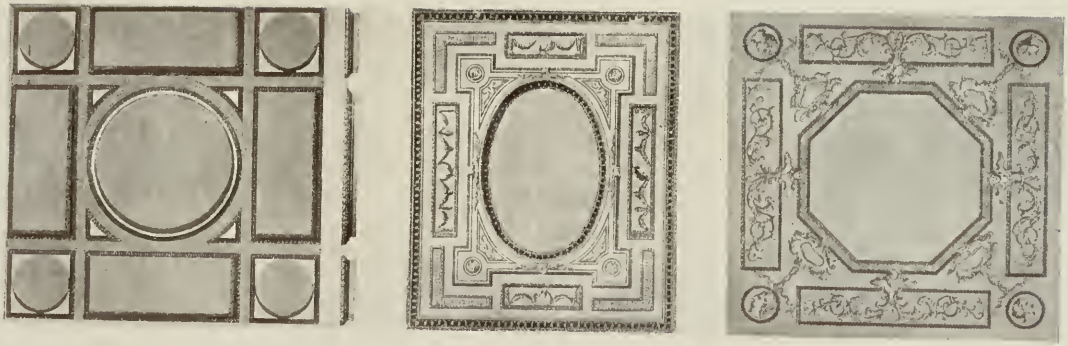
It must be remembered that Grinling Gibbons worked under Sir Christopher, and his carved woodwork has all the characteristics of the great architect's love

of emphasis in decorative detail, and much of the middle period of Italian Renaissance exuberance. Gibbons appears to have worked much from nature, but he and his compeers introduce the conventional often effectively, often, too, with the result of suggesting heaviness. The cornucopia and long-beaded anthers in cup-shaped flowers are apt to be repeated with fatal facility by this school.

It is curious to observe that after Inigo Jones the knack of blended heraldic symbols (not only the more difficult full coat of arms, but even the most adaptable of devices) with floral and formal decorative motives, possessed in so high a degree by the Gothic and early Renaissance artists, appears to have been lost. Certainly heraldry was employed lavishly enough by later decorators, but not happily. There is always a note of incongruity about it which betrays a curious poverty of invention when we contrast the later with the earlier work.

William Kent, who is perhaps the next most conspicuous figure in our branch of art, was a capable decorator, a common-

place architect, and an altogether inferior painter of genre. Yet he probably painted more ceilings with inflated allegorical and historical subjects in this country than any other man with the exception of Verrio and Laguerre. As a designer he had considerable invention, though decidedly tainted by exaggeration and lack of taste. We may take a specimen ceiling which he gives in his own book, a ceiling which he designed for a private house (fig. *b*). It will be seen that the large oval is surrounded by heavy, rather heterogeneous decoration, in which children's heads and peacocks are jumbled with floral arabesques. If we compare this with Inigo Jones' Greenwich ceiling (fig. *a*) the decadence is all too obvious. Some very characteristic work of his is to be seen at Kensington Palace. The plaster is heavy and lacks sharpness of outline. The design is generally involved. In the Presence Chamber we have a coved plaster ceiling by Wren, but decorated by arabesques in bright reds, blues and gold by Kent. Perhaps his most startling performance is the Cube room, which he both



Plaster Ceilings (*a*) Inigo Jones. (*b*) William Kent, (*c*) Isaac Ware.

built and decorated. It has a coved ceiling with a flat top decorated with a huge star of the Garter. The coves are covered with octagon panels enclosing a large flower, and with flowers painted between the panels. At the angles are broad bands with erect full figures of nude boys and garlands running up to the flat panel. Above a strongly projecting moulded cornice is a heavy rope of bay leaves bound with ribbons and looking like an unwieldy snake. The frieze consists of voluted wave forms. A garish blue and a profusion of gilding accentuates the heaviness in an unpleasant way. It is but fair to say that this ceiling has been restored, so the assertive tone of the blue may not be the choice of Kent. At Lord Burlington's Chiswick house, Kent carried out a very similar combination; his octagonal hall had a vaulted ceiling, with deep coffers and heavy ornamentation, the whole vividly coloured, but with full-bodied pigments, not the pure tints that gave lightness even to coarse work of the early masters.

A further downward step is noticeable with the work of the brothers Adam, who

came within measurable distance of the brick box with cheap stereotyped classical ornamentation stuck on in the manner and style of pink and white cake decoration. Like Jones, Wren and Kent they preached the necessity of treating walls, doors chimneypieces, ceilings and even furniture decoratively in harmony with the architectural scheme of the building or room. The pity was that in attempting to adopt the classic style to the economical needs of the day, they degenerated into mechanical namby-pambyism. In their ceiling work they lightened the panels, employing Zucchi and others to adopt Grecian designs to modern conditions. The designs are simplified, or so arranged as to be easily moulded in their patent stucco, which could be prepared in the studio and placed in position to advantage. Sworn enemies to the glare of white, of the bold work of Jones and Wren, they adopted genteel tints (of the milky and chocolate cream order) and nice line and scroll work. In a few words : it was all devoid of strength and sincerity.

The spirit in which decoration was approached at this period is well shown by

Sir William Chambers, Surveyor General to George III., who, writing of Italian practice, really cites the work of the third or fourth stage of Renaissance decadence. He says : " The usual method is to gild all the ornaments and to leave the ground white, pearl, straw colour, light blue or any other tint proper to set off the gilding and ornaments to best advantage, but I have frequently seen that practice reversed with more success, by gilding the ground and leaving the foliage white, parti-coloured or streaked with gold." Practices these, which the warm-blooded Italians of the Cinquecento and earlier period would have regarded with disdain.

Richardson's large folio with coloured plates proves to what a deplorable artistic level, decoration had descended by the middle of the eighteenth century. Most of the plates represent ceilings designed by Richardson and executed by the plaster moulder, Rose. In the Court Room of the Drapers' Company the ceiling is in low relief plaster. There are three medallions and we have paintings representing Minerva introducing the Arts to Com-

merce, occupying the central panel, while figures emblematic of spinning and weaving fill the other two. The design and execution are poor, and the decorative filling between the panels is feeble. As the Company's armorial supporters are lions, and their crest a lamb, these beasts are introduced in smaller circles. But there is no feeling for heraldic art, and, indeed, the lion looks like an overfed sheep, while the lamb appears considerably fiercer than the King of the forest, which is the mark of heraldic painting of that date. The ceiling in the banqueting chamber though rather overloaded with detail is in better taste. In the middle, Apollo is shown seated in his chariot. Round this is a circle with figures representing the four seasons, and outside this another with twelve signs of the Zodiac. The whole of this occupies a central panel. On either side are three circles, the outer four containing figures of the four quarters of the globe, and the middle ones emblematic figures of Britannia and London. The figures are in stucco from designs by Joseph Nollekens, carried out by Rose

and Collins. Another plate represents a design for an arched ceiling, which Richardson describes thus: "The eight pictures in the oblong panels are representative of the funeral games instituted by Achilles, in honour of Patrocles: the Chariot Race, the Fight of the Cœstus, the Wrestling, the Foot Race, the Single Combat, the Discus, the shooting with arrows, and darting the Javelin, as described in Homer's Iliad. The three circular pictures exhibit Achilles offering a libation at the departure of Patrocles for his success and safe return from the field of battle. Thetis hearing the lamentations of her son, for the loss of Patrocles, comes with her Nymphs to comfort him, and to funeral fear. In the four smaller circles are emblematical representations of Honour, Immortality, Magnanimity, and heroic Virtue." A much better conception was the ceiling of the Grecian Hall at Kedleston, the seat of Lord Scarsdale. Richardson says: "As there are a great many paintings in chiaroscuro from the antique and from Homer's Iliad, on the walls of the Hall, it was judged improper

to introduce any historical pictures in the ceiling; Grecian trophies of stucco are therefore adopted, as proper accompaniments to the pictures in the Hall." The stucco decorations were by Rose. In all these ceilings by Richardson the colours are poor: we have pale greenish blue borders, creams, pale mauve and pink, while the paintings are carried out in very high colours, which gives quite a "penny plain and twopence coloured" impression.

CHAPTER VIII

TIMBER ROOFS AND CARVED WOOD CEILINGS

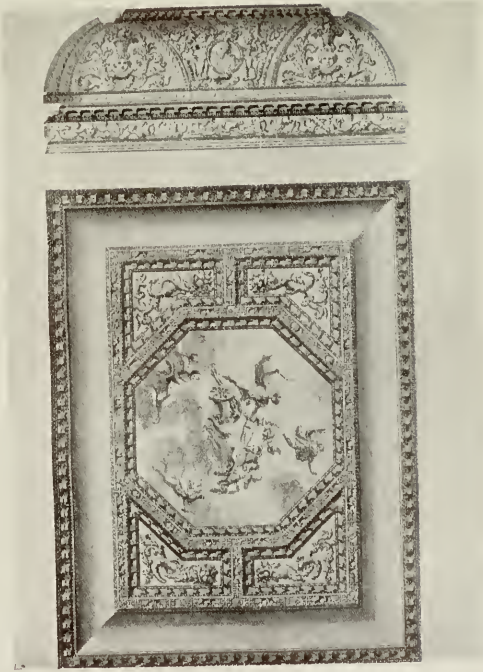
TIMBER ceilings may be divided into three broad classes : (1) open timber roofs, such as we see in churches and large halls; (2) ceilings with visible beams in conjunction with boarded or plastered surfaces; (3) boarded ceilings, plain or decorated and those of carved wood.

The simplest form of timber roof and ceiling is composed of a series of rafters resting on the top of the walls, or supported by one or more long principal beams running the whole length of the room, upon which a platform of boards or laths is placed to sustain the tiles or thatch of the roof proper, or the floor above. Of the development of this fundamental type we shall speak later.

A roof of the above description enters into the structure of a building as an integral part of it, but in a framed roof we have a carpenter's job, which is practically a complete structure by itself, resting on and fastened to the walls. These framed roofs embrace that whole wonderful series of open-timbered structures associated with Gothic architecture. Into the composition of these a large variety of members enter. The chief of these are the principals, or cross beams supporting the longitudinal rafters and purlins, on which boards or smaller beams are placed to support the outer shell, the ridge pole, generally supported by a truss or perpendicular beam, which are in turn supported by wall beams and plates, running down the side of the walls.

The tie-beam roofs are associated with the Norman, Early English, Decorated and Perpendicular styles. The beam is either laid across the building from wall to wall (as in the primitive type), or more usually is supported by curved braces, connecting it with wall pieces. Over the Trinity Chapel in Cirencester Church, the

Trinity Chapel, Cirencester Church.



Plaster Ceiling, Houghton. Isaac Ware.

tie beams are supported by curved braces, resting on small carved square pillars, which replace wall pieces and are not attached to the wall, but spring from carved Seraphims forming the capitals of pillars reaching to the ground. In other cases the braces are continued above the tie beam, and then form an arch intersected by the tie beam. Sometimes the tie beams of the aisles are carried through the walls to form corbels for the wall pieces and braces of the nave roof. As a rule tie-beam roofs of the Perpendicular period are very low-pitched, even approaching to flatness, in which case the timbering is reduced to the minimum, but the decoration is exceedingly elaborate.

A trussed roof has all the complicated appearance of the tie-beam type, but has the advantage of using smaller, and especially shorter timber. In this class of roof the common rafters are prevented from spreading by diagonal ties (the braces); all timbers are halved and pinned together with wooden pins. Both purlins and rafters are used, as well as curved braces. Sometimes the roof is high-

pitched, in later work, especially in the Perpendicular, almost flat. In any case the effect produced is a forest of timber overhead.

In arched-braced roofs, curved braces support the collar or cross beams between the purlins, in place of the tie beams.

In collar-braced roofs, the collar beams or merely the wall pieces, and principals are connected by straight or curved braces.

With hammerbeam roofs we have again a forest of timber, the hammerbeams being balks projecting from the wall and supporting the rafters by means of arched braces. These arched braces generally support cross beams; on which rest perpendicular beams reaching to the ridge (king post). Sometimes the tie beams have three perpendicular beams, in which case the middle and larger one is the king post and the shorter beams on either side, springing from the collar or tie beam and reaching to the purlins (the queen posts). In double hammerbeam roofs we have one row of projecting beams above the other.

In connection with the intricate and very often delicate carpenter's work involved in

all this knitting together of long and short, light and heavy timbers, with struts and braces, tenon dovetailed, or pinned, elaborate decoration was the rule. We have cambered tie beams, where the underside of great balks are cut away to give an arched appearance; the edges of squared beams are cut off or rounded; fillets and deep broad grooves are cut along them, and these grooves are sometimes filled with strings of beads or of billets, or with a running pattern of foliage cut out of the solid wood. Great floral or foliated bosses are also frequently seen, conventionalised in the earlier periods and more approaching naturalistic treatment as the Perpendicular is reached. Beams as they approach the walls may be decorated with flowers or leaves, or more or less roughly carved into the semblance of heads of beasts with open mouths, the latter a form frequently seen in domestic architecture. In churches we also see heads of birds, beasts and humans, grotesques or otherwise, but here the favourite motive is the chubby face and short wings of cherubs, which are also used as bosses in the middle

of beams over the nave. Hammerbeams are frequently carved in the form of full or half-length angels, seeming to float horizontally overhead. Angels in the perpendicular or standing position are also seen on braces and tie beams, sometimes carved out of the solid timbers, at others being separate carvings fixed in place. They bear trumpets, cymbals, scrolls inscribed with texts, or armorial shields. Bowden, speaking of Trinity Chapel, Cirencester Church, says: "Every part of this roof susceptible of enrichment has received it to the highest degree; the tie beams are well moulded, with a deep casement filled in with flowers carved out of the solid; most elaborately carved bosses cover the intersections of the mouldings. One very peculiar feature in this roof, which is not often met with in other examples, is the pendant which terminates the upright supports under the purlins and ridge." Floral pendants are, however, not uncommon. The wall pieces are also a constant object of decoration. They may be angels springing from architectural corbels, or beams wreathed about

by creepers. The corbels themselves may be purely architectural forms, branches of leaves, or heads. In domestic architecture the face of the corbel may bear a shield displaying initials, badges, crests or arms. The wall pieces are frequently connected by wall plates, forming a continuous band, treated now as a cornice with many mouldings, now as a frieze highly decorated with carvings or paintings, and, especially in domestic examples, usually terminating in an embattled top.

With all this dealing in huge balks and a multiplicity of smaller timbers, the old carving and minute sculpturesque detail, the decorative sense of the medieval builders and their immediate successors was not satisfied. The notion of leaving oak and other woods bare never entered their heads. They used colour with happy *abandon* already described when dealing with Gothic decoration, but as an example of how colour carving and intricate carpentry were blended we may cite Knapton Church, Norfolk. It is a double hammerbeam roof, with rather restrained carving; each horizontal timber, however,

is adorned with an angel holding a shield. The wall beams are carved effigies of Scriptural personages supported by corbels composed of angels also bearing shields. The wall plate above the cornice is adorned with a double row of angels holding emblems of the Passion and other sacred symbols. The colouring on the timbers and the background of boards was mainly a rich yellow, with decorations in red, green and white. The colouring of the figures is somewhat unconventional, at all events as regards our ideas of angelic appearance : they have golden hair, green or red robes, while their outspread wings are painted red or green in reverse order to the robes. A pretty enough contrast, though rather suggestive of parrakeets to the unregenerate mind.

Three fine types of domestic timbered roofs are to be seen respectively in Westminster Hall, Crosby Place, and Hampton Court.

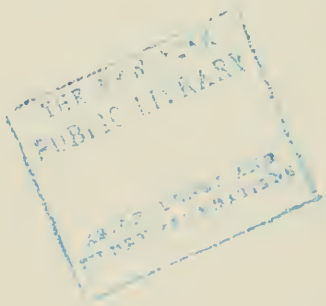
Westminster Hall, which formed part of the old Palace of the Saxon kings and of William of Normandy, was rebuilt in the early part of the fifteenth century, and we

have the splendid open-timber roof to-day practically as it was put up under Richard II. It is really a composite roof, a combination of the hammerbeam, arched brace and collar beam, with king and queen posts and numerous upright struts. Along the sides of the walls are stone corbels, from these spring double braces of considerable scantling, the under one being curved and carried to the end of the hammerbeam. These hammerbeams project far into the Hall, and are carved in the shape of angels bearing shields adorned alternately with the arms of Edward the Confessor and Richard II. The upper part of the double beam is carried skyward, intersecting the hammerbeam and curving outward to meet the brace from the opposite wall, forming an arch, queen posts from the head of the hammerbeam acting as struts. A brace is carried from the base of the queen post to the centre of the arch. The queen posts are carried right up to the purlins, and from purlin to purlin right across the Hall is the collar beam, with king and queen posts supporting a tie beam above. The space between the arched braces and beams

is filled with perpendicular curved beams. Thus we have another arch within an arch as well as triangles. From brace to brace, over the roof beams are purlins supported by arched braces, the whole great structure being knit together into one perfect structure. The magnitude of this work will be realised when we find that the Hall is 239 feet long and 66 feet broad, while from the floor to the ridge is a distance of 90 feet, from the floor to the corbels, 21 feet, and to the angels, 42 feet. The depth of the roof itself is 48 feet. Sydney Smirke, who inspected the roof closely in the early decades of last century, classes it as a common collar-beam roof. He says: "A brace of very great strength has been made in every truss to relieve the principal rafter, by catching it at about two-fifths of the height upwards, and carrying down the pressure nearly ten feet below the foot of the rafter." He adds that the arch formed by the great curved rib (or continuation of the hammerbeam brace) does not sustain the pressure of the roof, for as a matter of fact its base in many cases did not rest on the stone corbels at the date of

Knapton Church, Norfolk.

Portico, Villa Madonna, Rome. Raphael.



his inspection, from which it appears to, and no doubt originally did spring. The arch, therefore, rather hangs from than supports the principals, though, of course, it is of use in knitting the whole together. This roof, which Thomas Fuller speaks of as a forest of cobwebless timber, in allusion to the legend that it was built of Irish oak, among which no insects would live, is said to have been a replica, on a larger but simplified plan, of that over the adjoining St Stephen's Chapel, which was destroyed by fire.

Crosby Place, which Sir John Crosby erected in Bishopsgate as his town residence in the third quarter of the fifteenth century, was originally a very extensive building, but had suffered severely long before it was pulled down and re-erected at Chelsea. It possessed a large crypt with fine groined ceiling. The lofty Great Hall has a slightly vaulted ceiling, with a considerable amount of moderately heavy timber work, which, however, comes little below the vaulting, to the top of the windows, placed high up in the walls. Between the purlins and rafters are closely

fitted boards. Down the whole length of the Hall are three rows of king posts, each terminated by short pendants, slightly carved. Braces form the two small middle arches, springing from the king posts, with a half arch on each side braced to the wall posts, which are supported by small corbels, the open space between the top of the braces and the rafters being filled in with small vertical beams. In this way a series of bays are formed right down the Hall. Another chamber of interest in this old mansion is the Throne Room, with its elliptical ceiling divided into small compartments by slender ribs of oak, filled in with panels, all finely carved. A combination of the two styles, with considerable modifications, may be found in the big Hall at Hatfield.

Hampton Court Palace also affords a fine specimen of domestic Gothic roof. This is seen in the Great Hall built by Henry VIII., in the perpendicular style. It is a single hammerbeam roof of seven bays. Substantial purlins are carried right down the Hall. The bays are formed by two half arches supporting a large central

arch; above this the same arrangement is repeated on a smaller scale, the open parts being filled with pierced tracery. Each half arch is composed of a wall post resting on a carved corbel, from which springs a curved hammer brace, supporting the hammerbeam, which juts out horizontally from the wall post. Each central arch is formed by curved collar braces, descending from the rafters above and meeting the hammerbeams and braces below. At these junctions are magnificently carved pendants, composed of pillars, pediments, floral and heraldic enrichments, all pierced *à jour*. These pendants are particularly worthy of study, owing to their evidence of Renaissance influence, the architectural features being classic. Above each central arch is a horizontal collar beam, supporting open timber, and scroll work filling the upper parts. The corbels are adorned with heraldic devices—supporters and coats of arms, and we also see heads carved in wood. Spandrels of elegant form fill up the space between the arches, enclosing bosses carved and emblazoned in colours with the arms and badges of Henry and

Jane Seymour. It is certainly a magnificent production, superior to the ceilings of both Crosby Hall and Eltham Palace, and comparable in its own way with that marvel of carpentry work—the timber roof of Westminster Hall.

While in most timber roofs the ceiling of boards may be said to be behind the timbers, resting on the purlins and rafters and forming a platform for the outer shell, the boarded ceiling is placed in front of the beams and rafters, hiding them completely. We find instances of this practice at a fairly early date. The boarded ceiling may be flat, slanting (over aisles for instance), or shaped as a vault either in the form of a half sphere, or with polygonal sides. A good example of this is the ceiling of the church at Wimbsbottem, Norfolk. The boards are frequently decorated with carved beading concealing the joining of the boards, and with wood or metal bosses. For instance, a rather favourite combination is blue-painted boards studded with leaden or golden stars. Colour decoration on these boarded ceilings was decidedly lavish, quite the

opposite to the modern practice of merely varnishing the natural wood, and perhaps adding a stencilled border in monochrome or pale tints.

In the "*Parentalia*" we find a long quotation from Dr Plot who describes and eulogises Sir Christopher Wren's flat timber ceiling over the Sheldonian Theatre, Oxford. This was Wren's second architectural venture, and the task he set himself was to devise a flat ceiling for a great expanse, only using small timbers. He devised a huge framework, enclosing a perfect network of short and long beams, arranged like a grating, each piece tenoned into the other. It is the outcome of elaborate mathematical calculations. This work, however, is all concealed. Dr Plot, describing the decoration, adds: "The painting of the ceiling is worth examination; for in imitation of the Theatre of ancient Greeks and Romans, which were too large to be covered with lead or tile, this, by the purity of the flat roof within is represented open. And as they stretched a cordage from pilaster to pilaster, upon which they strained a covering of cloth, to

protect the people from the injuries of the weather, so here is a cord moulding, gilded, that reaches cross and cross house both in length and breadth, which supports a great drapery supposed to have covered the roof, but furled up by the genii round about the house toward the walls, which discovereth the open air, and maketh way for the descent of the Arts and Sciences that are congregated in a circle of clouds." From Elmes, who reproduces the plan and details of the timber ceiling, to be found, both in Dr Plot's work and the "*Parentalia,*" we learn that the moulded cords were of carved wood, and were only placed there as realistic ornaments.

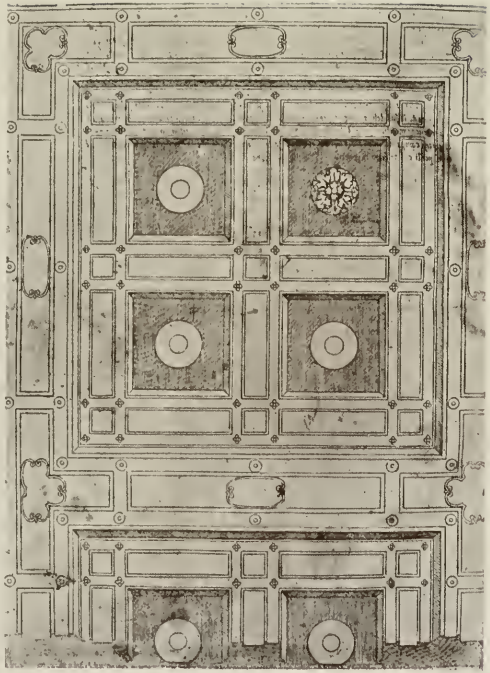
Flat boarded ceilings gave rise to a system which practically continued wall panelling overhead. Such ceilings often have panels of different sizes and shapes, either deep sunken or raised, and outlined by more or less elaborate mouldings. The decoration, which may be conventional, geometrical or largely heraldic, is sometimes carved in the solid wood, or is applied, being carved in wood or more generally moulded in lead, in composition

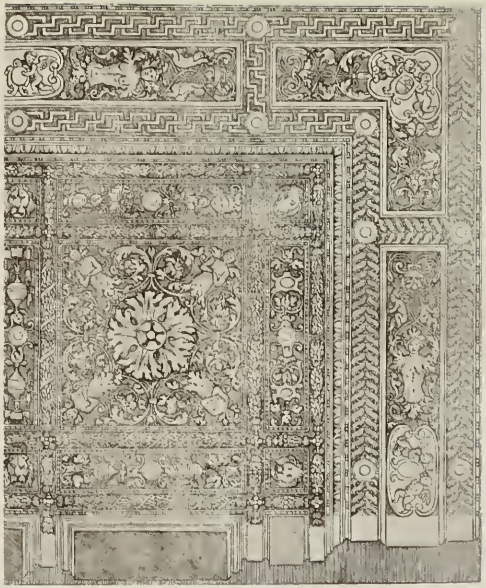
or plaster. Charming specimens of wood panels, lead and composition-moulded decorations are to be seen in the ceilings of Wolsey's portion of Hampton Court, which show the foreshadowing of later all-plaster work.

Serlio in his treatise describes and portrays certain flat carved timber ceilings which he designed for the Library of St Mark, Venice. It is particularly worth study, because, apart from the merits of the design, it gives a capital demonstration of how decoration and method may be adapted to fit in with particular cases. He shows the skeleton design of his ceiling, with large and small squares, oblong and oval panels, the mouldings and roses at intersection being merely roughed out. The next stage shows greater detail, more incavo and relief work, and he observes that in this state, painted in monochrome, or we might add two harmonising or contrasting colours, the ceiling is suitable for a small, low-pitched room. Then we see greater detail being added, partly by more carving, but chiefly by means of moulded stucco. The panels are filled up with floral

designs in high relief, Greek patterns are given to the mouldings, the flat bands are covered with floral scrolls and arabesques, and the roses assume more importance, growing in size and intricacies. The plain geometrical design with a few conventionalised floral forms has now become a highly decorated production in which geometrical patterns intermingle with the highly fanciful Renaissance arabesques, in which half-conventionalised, half-realistic vegetable forms are blended with animal forms and human masks. Such a ceiling is intended to be coloured, with the vivid pure colour of the Cinquecento, set off by great splashes, bands and touches of gold.

This elaborate form of ceiling came to England at a rather later period. An interesting example is that of the Chapel Royal, St James' Palace, which is attributed to Holbein, and is dated 1540. It is almost flat but slightly coved at the long sides. The wooden base is divided up into a great number of panels by rib mouldings of wood, the background being covered with plaster which is carved into a variety of





Carved Wood Ceiling with coloured stucco. Sebastian Serlio.

decorations in high relief. The centres of the panels are filled mostly by Tudor heraldic devices, including the red rose within the white, the Beaufort portcullis, the sun in splendour, fleur-de-lis, Irish harp of excellent outline, winged dragon of Wales, Prince of Wales' feathers conjoined with a sun in splendour, and the royal coat of arms (quarterly France modern and England, i.e., first and fourth quarters blue with three golden fleur-de-lis; second and third quarters, red with three gold lions, *passant guardant,* the tongues and claws blue). Many of the ornaments are heavily gilt and shaded boldly with bistre. There are scrolls bearing mottoes such as "Henricus Rex VIII," "H. & A." (Henry and Anne of Cleves), the initials joined by lover's knots, "Vivat Rex, 1540," "Dieu et mon Droit," etc. The background of the panels is painted a dark blue, the mouldings of the ribs are painted green, and are ornamented on the under side with a small running ornament cast in lead. The foliated ornaments are also green, while the heraldic devices and supporters are em-

blazoned in proper colours. It is a handsome production, though its mundane decoration is more suitable for a State apartment than a church. It has undergone various repairs, notably by Sir Robert Smirke in 1830, but practically remains in its original condition, thus giving us an interesting and exceptionally fine specimen of the mixed work referred to above. It is a kind of work that found many experimenters and liberal patrons.

Hampton Court offers a most happy hunting ground for those interested in the decorations of ceilings. Not the least noteworthy specimens are the few remaining going back to Wolsey's time. George Cavendish, Gentleman Usher to, and faithful biographer of the great Cardinal, writes enthusiastically about the splendid Thameside Palace, which he watched gradually rise under the commanding genius of his master, who laid all civilised Europe under contribution to embellish this gorgeous cell, where the mighty of the earth were to come and do him homage. Cavendish sings of :

"My buildings sumptuous, the roofs with gold and byse,
Shone like the sun in midday sphere
Craftily entailed, as cunning could devise
With images embossed, and most lovely did appear."*

Of these purple ceilings, flashing with gold, something remains. The ceiling of the so-called Cardinal's Closet, at the east side of the Clock Tower, is flat, of wood panels with ribbed octagonal designs of moulded wood and decorative scroll work, balls and leaves of lead being placed at the intersections. Originally the background was painted blue, and the raised patterns gilded. The Cardinal's Withdrawing-room, adjoining the Great Hall also has a flat timber ceiling, decorated with moderate sized pendants, terminated by circular cartouches emblazoned with heraldic shields. Between these are fleur-de-lis, Tudor roses, portcullis and other badges, as well as shields with the quartered royal arms, France and England. Moulded ribs of oak divide the ceiling in geometric panels, the whole formerly being richly

* Byse has been translated as blue, but we must take it to be purple, for bys referred to a brownish fair, and is a cognate word with *bis*, brown (as in *pain bis*) and bistre. Entailed means carved, being derived from *entail*.

painted. The great Watching Chamber, or Guard-room, has a low ceiling of intricate ribs and pendants at the intersections. The ribs and pendants are of oak. In the centres of the compartments are oaken wreaths bound by ribbons, enclosing arms and Tudor badges, including the white Yorkish rose within the Lancastrian red rose, Henry VII.'s hawthorn bush, Jane Seymour's phœnix rising from the flames, and her castle with rose bush and phœnix, fleur-de-lis, the arms of France and England quarterly, all in their proper colours and gilt. These ornaments are carried out in a form gesso—in this case apparently a kind of *carton pierre,* or paper soaked in glue, made into a paste and pressed into moulds.

After the Restoration wood carving became more florid, we have many specimens of combined boarded backgrounds, with plaster or wood ribs, arranged as high relief mouldings or as flat strapwork, and sometimes carved wood framing. But we also have the frankly carved wood specimens associated with the school of Grinling Gibbons. The work of this school, as of

the master himself, is marked with consummate craftsmanship, often keen observance of nature, but very little taste or sense of the appropriate in design. Gibbons' long garlands, short swags, drooping sprays of foliage and fruit (often mixed with birds and game, and sometimes supported by naked amoretti) are usually wonderfully close to nature (although occasionally the natural is curiously jumbled with the conventional). The carving is generally in high relief and deeply undercut. You feel that you could pick the various items to smell or taste them, yet the general effect is poor, because too heavy, and seldom seemingly in its right place. The carvings of this school always appear as somewhat obtrusive accessories, not as the obligatory accompaniment or spontaneous outgrowth such as we see in the best Gothic work and of all true decorative art. Of the actual skill of Gibbons there can be no doubt, but he does not belong to the select band of perfect designers. Two good examples of his ceiling work, in different manners, exist in London, and we append a description of these,

kindly contributed by Mr Mackenzie MacBride, who has made a special study of this period : " The ceilings carved in lime wood or oak left to us by the great wood carver, Grinling Gibbons, are few in number, and they stand quite apart; for in England carving in wood of any kind is as much a lost art as is engraving in mezzotint since the days of Samuel Cousen and David Lucas, the last of a great tradition. There are specimens of Gibbons' ceilings in the heart of London, which, though quite unknown to the public, are nevertheless worth study. I refer to the fine ceiling of the Court Room of the Haberdasher's Company in Gresham Street.

" The Haberdasher's Hall was destroyed, like so many others in the great fire of London, and Sir Christopher Wren was called in to design a new building. In the fire which broke out on the premises of Messrs Tapling, next door, in 1886 or 1887, the great Dining Hall by Wren was almost completely destroyed, the roof being entirely so, but the Court Room and the Drawing-room remained unharmed.

" The ceiling of the Court Room is an

admirable piece of work; as a specimen of Gibbons' carving at his best it would be hard to find work more spirited, delicate, and deliciously suggestive of the lusciousness of fruit and the beauty and freshness of flowers wet with the dew from the walled garden and green meadows where they grew, than in the splendid triangular panels at the four corners of the ceiling, which are the chief strength of the whole well-planned design. From these panels, which are deeply undercut, and in full relief, the eye passes to the great oblong central space, which forms the centre of the ceiling and throws the work of the carver into prominence. The intervening space is filled with swags of leaves of bay, with grapes and other fruit all in high relief and boldly and deeply undercut.

"Near the entrance are carved and emblazoned the arms of the Company, and the room has a plain and admirably effective frieze of the leaves of the acanthus painted in gold. In the recesses on either side of the fireplace, designed so that they may in no way distract the attention from the great central portion of the scheme, are two

oblong panels carved in low relief. The moderation in the carving of these panels strikes one as being well considered. A novice would have exerted himself to beautify them, Gibbons knew that to do so would be to make them centres of observation, and so spoil the spectator's sense of the beauty and completeness of the whole ceiling, and the great beauty of the four triangular panels set close by the carver of the restful undecorated oblong in the centre of the room.

"The only jarring note in the work strikes us as being the coat of arms, which, amongst the classical suggestions of the acanthus and other forms of ornament used, gives a suggestion of incongruity, and, in view of the wonderful delicacy of the chief panels, almost of vulgarity. This is, however, little reflection on the designer or the sculptor, for the presence of the arms was inevitable, and the designer, in placing them near the entrance and outside the main design, minimised the evil as far as it was possible.

"One of the excellent points in the decoration of the room is that, though rich of its

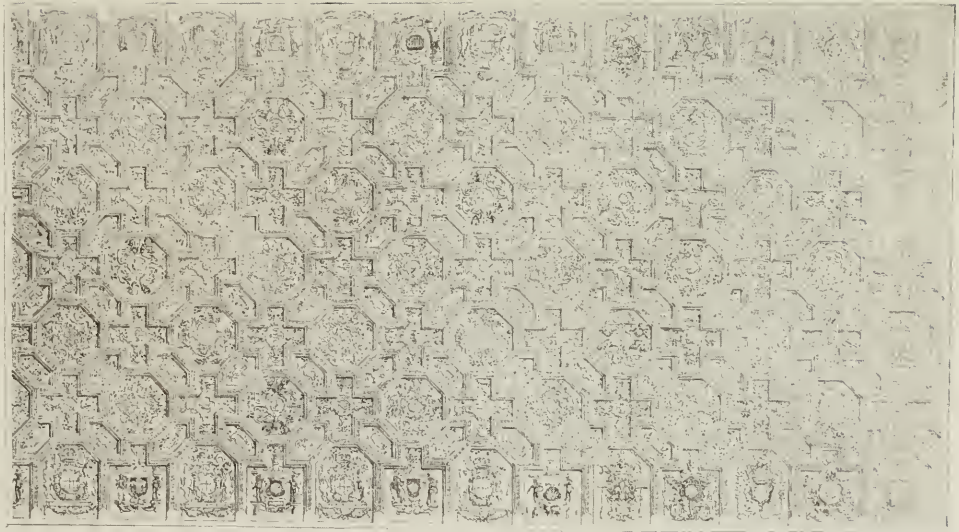
kind, it is not overdone, as was so apt to be the case in designs of the kind. In this case the large plain central oblong saves us from excess and carries the eye for relief to panels as fine as anything we know in the London neighbourhood.

"Gibbons was seldom reticent. He was German in taste rather than British. As a rule he gave us an orgy: here he has given us only a solid meal, which we can digest and appreciate.

"If the Court Room is strong and effective, the Drawing-room is a triumph of delicacy and daintiness. The design, which is in low relief throughout, centres round a diamond formed of four swags joined at each point by a trefoil, the diamond is overlapped by two circles formed of a string of myrtle leaves on the outside, and decorated inside with a semi-circular arrangement of leaves. In the middle of these rings are radiations springing from the chandeliers: these are surrounded by wreaths of leaves and flowers. At the four corners of the room are ventilators formed out of roses surrounded by wreaths. A cornice formed of vases alternating with

honeysuckle adds greatly to the effect. Over the door is a simple swag of silk; the walls are panelled throughout. All the decorative carving is painted gold, while the ceiling and walls are cream colour. The whole effect is excellent and admirably suited to the purpose for which the room is intended. It is refined and dainty rather than flamboyant, and there is no note of vulgarity in any part of the scheme. Gibbons and the men of his time delighted in catching the effect of silk in their ribbons and drapings, and here we agree with Ruskin who did not consider such cheap and ephemeral objects worthy of a great craftsman's skill and imitation, in a quite alien material. The presence of the ribbon is the only thing the designer might have left out in a delightful room."

It will be seen that in the main we are in agreement with Mr MacBride. An instance of Gibbons' rather weak designing talent is shown in his treatment of the armorial bearings of the Company, which appear rather obtrusively as outside the scheme, instead of being incorporated with it, and the crudities of a bad period of



Ceiling, Chapel Royal, St. James's Palace. Attributed to Holbein.

heraldry, softened by association with floral scrolls, which is certainly the course that the men of the early Renaissance would have taken.

With the Georgian period, this kind of ceiling went out of fashion, and of recent years has been represented practically only by flat and polygonal construction, the boards being either varnished or coloured in tempera.

CHAPTER IX

SOME CHURCH CEILINGS

VARIOUS phases of decoration for church ceilings and roofs have been dealt with at length in the preceding chapters, but several particular examples afford useful lessons for us, and so deserve detailed description.

Early Christian art may be said to have lasted until A.D. 800, and most of our knowledge of it we owe to the carvings and paintings in the catacombs at Rome, miniatures adorning manuscripts, and vestiges of decoration on a few architectural remains. These early churches—whether of the basilica—oblongs with an apse, and in the completed specimens, aisles; or the round often had vaulted ceilings, barrel-shaped over the body of the oblong edifices, and groined over the apse. These were of wood, bricks or stone, and were sometimes

plastered. Deep cofferings, as in classical prototypes, are not uncommon, and both carving and painting were employed. Applied decoration was essentially symbolical, geometrical figures included the cross (both the Latin with long lower limb, and the Greek with limbs of equal dimensions), triangles (the Holy Trinity), and its specially mystic forms, the pentacle (two triangles super-imposed, one with the apex turned up, the other turned down, forming a fretwork six-pointed star), and the triquestra (or endless knot twisted into a three-lobed figure with a central triangle); and the trefoil of many types. God the Father is represented by a hand issuing from a cloud; the Holy Ghost by a dove. Our Lord was represented by the lamb (the cross standing for the wider sense of Christian religion), and a fish. The latter gave rise to that peculiar form of the aureole or glory, the *vesica piscis*, a pointed ellipsis, supposed to be the outline of a fish's bladder, and frequently shown as enclosing the figure of Christ or some sacred emblem. Three fishes placed in a circle or grouped as a triangle symbolised

Christian baptism, being more emphatic than the chevron and other wave forms, although used for the same purpose, as they had been employed before to represent pagan lustrations. A dolphin, that pagan emblem of youth and sea power, stood for the Resurrection. At quite an early period, however, pictures of Christ were attempted. There were practically two schools of art, the African, which depicted the Saviour as ugly, with the desire of emphasising the triumph of the Divine over the externals of Incarnation (and from this school we have black effigies of Christ), and the Greek school, which represented Our Lord as the physical embodiment of beauty. He was shown as a beardless youth, with long curly hair. From this latter school the Latins evolved a type that has stood as the basis of iconography ever since. It shows a man of about thirty, with long oval face, broad smooth forehead, straight slender nose, arched brows, hair parted in the middle, full beard, and sweet but grave expression. This perfect type, however, came at a rather later period. The eagle of St John,

winged ox of St Luke, and winged lion of St Mark, or even eagle, ox and lion-headed human bodies were often used. Other animals and also inanimate objects were employed symbolically. As pointed out above, the portraiture of Christ was a slow evolution, for in the early stages, figure painting, though not rarely deeply impressed with a feeling of religious ecstasy, is crude, without that sense of proportion and physical beauty so general among the Greeks. Yet the pagan influence is quite unmistakable in many of the paintings, which betray a continuity of memory if not of superstition, for not only is the grouping constantly modelled in mythological subjects, but we see mythological figures (such as river-gods and personifications of the Elements) introduced, slightly disguised, or disguised not at all. The paintings are very flat, with little suggestion of the roundness of life, and practically a complete ignoring of perspective.

Byzantine church decoration, and indeed decoration in this style of every description, is more distinctly Christian and devotional in character, though with a

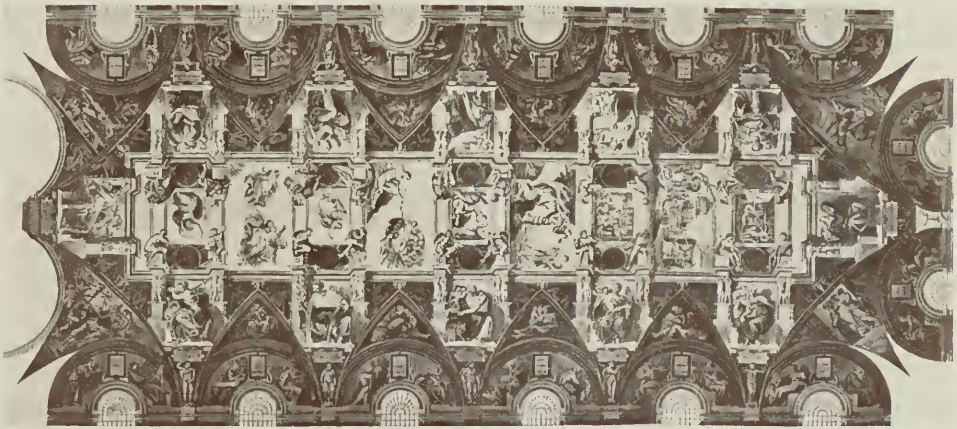
curious suggestion of formalism and the importance of an elaborate ritual. Crude and stiff as is the figure drawing, it is effective. The angular figures, unlike those in antique buildings, are gorgeously apparelled, vivid colour and gold being used, and are usually made to stand out from a background of broken gold, or a light tint laid on flat. Such paintings are commonly richly framed in mosaic, or broad lines of brilliant colour and gold, while the mass of ceiling, vault or wall is covered by open scroll work, or very heavy arabesques, foliated scrolls, often framing little square, circular or oval medallions painted or filled in with mosaic pictures—such as portraits of sacred or historical personages, of birds and beasts. Although Byzantine art as a complete whole had but a short reign in Italy, and still shorter outside the peninsular in occidental Europe, it lingered in Eastern Europe and flourishes to this day in Russia, while its influence on art in general and especially religious art was deep and lasting.

Architects and artists of the Renaissance and early Gothic inherited the traditions of

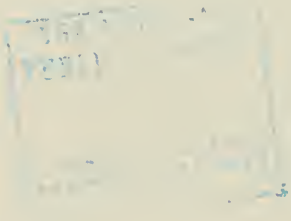
primitive Christian art, largely modified by Byzantine feeling, and to some extent technique. Geometrical figures and symbolism, as we have shown, played a conspicuous part in decoration. There was a great tendency to use colour in masses and in strong contrast, while figure painting was largely resorted to. The Romanesque and, indeed, the whole medieval school, shows a rapid technique, with a struggle between pure conventionalism and a dawning, but awkward naturalism. Figures stand out from backgrounds of pale, pure tints, generally blue; gold and rich colours are used to heighten effects and add ornamentation.

Cimabue marked the link between the old order and the dawning of the new. He shows a devotional spirit, a sense of colour and a distinct intention to approach nature. One of his best known and most characteristic works is the embellishment in the lower Church of the Convent of St Francis, Assisi. The four compartments of the vaulting are filled with half-length figures of the Saviour, St John, the Virgin Mary, and St Francis, exhibiting the stig-

mata. All four have the plain glory; the figures are rather stiff, but well drawn and coloured; the draperies belong decidedly to the old order. Two angels, each holding a globe and cross, occupy the spandrels dividing the compartments. A rainbow ornament is seen in the background. The surrounding space is richly decorated with symbolical ornaments, such as the winged bull of St John, crosses and flowers. It is to be noted that the angels have hair of that rich auburn hue which was afterwards to be identified with Titian's school. Cimabue was appointed *Capo Maestro,* or chief of the mosaic artists for the Duomo at Pisa, where we have from him a marvellous Christ in His Glory in the apse. Michel Angelo Buonarrotti showed a fine combination of naturalism founded on a study of classic examples and on anatomy. At first his manner leaned more to naturalism, then his own powerful imagination prevailed, and we have a freer style, with a grand representation of beauty of form. It is to this stronger, more vigorous manner that his great work in the Sistine Chapel, Rome, belongs. He decorated the



The Sistine Chapel, Rome. Michel Angelo.



whole surface of the Chapel, a colossal effort, for the ceiling, with which we are more immediately concerned, measures 132 feet by 44 feet. He began his work in 1508 and completed it, practically unaided, in 1512. The ceiling is a plain, flat arc of an ellipse, 68 feet above the floor. In order to produce an effective yet natural design, to occupy such a tremendous expanse, Michel Angelo fell back upon his profound knowledge of the art of building. He designed an imaginary architectural scheme, in which columns, pillars, entablatures, cornices and so on rise gracefully from the walls. These architectural members are painted to represent marble and bronze, carved and chased with classic mouldings and bold ornamentation. In this way he was not only able to divide up the space into suitable sections, but provide an appropriate framing for his pictures, a framing, which, while dividing, linked up the whole majestic series. As part of this architectural machinery we have a most extensive and varied series of figures, single and grouped, now painted to life, now represented as bronze statues, occa-

sionally doing duty as caryatides, but more commonly as statues, or living figures connected with the building. The effect is to produce a most natural sense of blending between the walls and ceiling and the spectator. A further step in this illusion is provided by twelve panels filled with pictures of the Prophets in appropriate attitudes, and with their attributes, the enraptured beautiful young Delphic Sybil, and the withered old form of the Cumean Sybil, the face worn with the knowledge and wisdom of ages. Two boys on each side of these twelve panels are shown standing on pedestals supporting on their heads with uplifted hands the architraves and cornices which run round the central panels of the ceiling. They are most lifelike in appearance, and although there are forty-eight of these chubby, almost undraped figures, each boy assumes a different attitude, and has an individual expression. This same care in design is seen throughout. These prophets lead up to another series of twenty-two small panels, filled with groups of figures representing the genealogy of Christ. All this

is to set off the nine large middle oblong panels, the four lunettes in the corners, and the ten small circular panels in which the Old Testament story of Genesis, from the Creation to the Fall of Man, is told with the sure touch of genius. The first oblong panel, which is immediately over the awful painting of the Last Judgment on the wall below, shows, as Michel Angelo's pupil, Asconi Condivici, says: "God Almighty with uplifted arms separating light from darkness." In the second panel the Creator surrounded and supported by angels, holds the Sun in His right hand and the Moon in His left. In the third, God commands the sea to bring forth fish. The fourth and fifth show the creation of Adam and Eve. The sixth panel is divided into two sections: in the upper we see Evil, represented as a snake, with the bust, head and arms of a woman, coiled round a tree and tempting the first man and woman; in the lower, Adam and Eve are driven from Paradise. The seventh panel represents the sacrifice of Noah; the eighth, the Deluge; the ninth, the drunkenness of Noah. The four lun-

ettes contain paintings of the people perishing by a swarm of biting serpents; the punishment of Haman and the ascent of Mordecai; the death of Goliath; and Judith and Holofernes. The ten circular panels bear groups appropriate to, and elaborating the story told in the larger oblongs. The whole extraordinary production with its army of figures, is instinct with life and piety. Each figure is a masterly study in pose and expression. The sublime grandeur of the Creator, aloof and beneficent, is far removed in conception from the angelic and human throng. Not only are we shown youth, age, but the very feeling of the various personages. The anatomy is a revelation, and the daring foreshortening, for instance in Jonah and certain of the accessory figures, displays a sure grasp and a knowledge of visual effect that has perhaps never been equalled, certainly never surpassed. The colouring also, suffered much though it has, is superb. But, when all is said and done, the architectural machinery apart, this ceiling represents painting in the wrong place. We are dealing here with high art, not

decorative art, and so the full beauty can never be appreciated at its worth, even when the adventitious aid of the mirrors offered by guides are used. Of the whole series of pictures, the two first alone appear to be in their right places.

In St Peter's, Rome, the immense and lofty nave is covered by a barrel vault, the painted and gilded stucco being ornamented with deep coffers, these rows being alternately oblong and square. Coffers with bevelled edges also adorn the soffits of the great arches. The cupola of the dome, 412 feet from the floor, is beautifully enriched with mosaic ornamentation, surrounding four mosaic panels with figures of the Saviour, the Virgin, and the Apostles. Above all, on a level with the lantern is God Almighty. St Peter's is, however, more remarkable for the majestic proportions, the grandeur of its sculptures, than for its applied decoration.

At Parma we have some remarkable work by Corregio. The cupola of San Giovanni is treated as Heaven. Christ is seen in glory, with a background of clouds, and is an extraordinarily successful

example of foreshortening. Below are the Apostles, reclining in different attitudes on clouds and gazing upwards in rapt attention. This was painted in the year 152. Two years after the completion, Corregio carried out a similar scheme in the Cathedral of Parma. Here, too, the cupola presents a view of the Heavens, but with more ambitious grouping and with a most happy utilisation of the peculiar conditions of lighting. The dome is without a lantern, light being admitted through windows in the lower half. The subject of the painting is the Assumption of the Virgin. Christ is depicted in the upper half of the cupola coming forward through an angelic host to greet the Madonna, who in the lower half is borne upwards by the angels. Christ appears as the centre of light; His mysterious effulgence sweeping downwards to the ascending group. Placed in the lower part between the windows are the Apostles gazing reverently and awe-struck on the scene, while behind them are genii bearing candelabra and other ornaments. In both cases the colouring is beautifully soft, well suited to the subjects.

In quite a different style is Corregio's work at the once wealthy Convent of San Paulo in the same city. Here the most striking painting is on the walls of the chapel, which tells the story of Diana returning from the chase. The vaulted ceiling is represented as a pergola, or trellised tunnel covered with vines. It is a mass of most realistic leaves and fruit. But here and there are openings in the foliage and trellis, through which a bright blue sky and fleecy clouds are seen. In these openings, silhouetted boldly against the heavens appear naked cupids, single or in couples, wrestling and playing, some bearing attributes of the chase. There are altogether sixteen of these figures, and their clear flesh tints produce a delightful harmony with the bright blue, the white clouds, and vivid mass of green broken up by the trellis work. It is charming in design, and quite a model in the harmonising of colouring and the handling of light and shade. Like his other work in Parma, this painting looks quite appropriate in its position.

Rubens was another master of colouring

and the contrast of light and shade, with a firm grip of design, and the use of foreshortening. When he chose, his ceiling painting was admirable, well adapted for decorative purposes, not giving the spectator the impression (as his great work in the Banqueting Hall, Whitehall, does) that he is cricking his neck to gaze on a badly hung picture. Excellent specimens of his better manner for this class of work adorned the ceilings of the lower and top galleries in the Jesuits' Church at Antwerp, which was struck by lightning in 1710, when Ruben's paintings were destroyed in the resulting fire. Happily the paintings had been copied by Jacob de Witt, and of these copies we possess copperplates engraved under De Witt's supervision. The foreshortening is very fine, and in most cases the subjects are carefully chosen for treatment on ceilings, as our two reproductions show.

The blending of sculpture or carving and painting was, of course, very common in churches. Equally happy combinations of mosaic work and painting are to be seen in

Siena, Venice, in St Peter's, Rome, and in our own St Paul's.

A peculiarity of the dome of St Paul's is that it is in three distinct parts. First we have the outer shell, or dome proper; then a brick cone rising to the top of the dome, with elaborate timbering between the two, and within the cone the ellipsoidal cupola, which is supported from the vaults on eight columns. This cupola is open at the top, with a railed gallery running round it. Through the aperture the inside of the brick cone, which is gilded, is seen. Light pours in through elliptical windows in the cone, this light being derived chiefly from the lantern above. Wren intended that his cupola should be adorned with mosaics, but it was left bare of ornament for some years after completion, and then Sir James Thornhill was commissioned to cover the eight great spandrels with paintings, which he executed in grisaille. The figures were of colossal size and represented the miraculous conversion of St Paul; the punishment of Elymas the Sorcerer; Paul at Lystra; the conversion of the gaoler at Philippi; Paul

preaching at Athens; the burning of the books of magic at Ephesus; Paul before Agrippa; and his shipwreck. While Thornhill was engaged on this painting, standing on a scaffolding hundreds of feet above the floor, oblivious of everything except his work, he stepped back to judge the effect of some finishing touches and would have toppled over, had it not been for the promptness of his assistant, who dashed a brush full of colour on the painting. Thornhill darted forward and was saved. Good as was the design, the medium chosen and the immense height made the decoration quite ineffective. Moreover, the atmospheric influences soon damaged them, and they had to be restored in 1854. This was felt to be a mere makeshift, and steps were taken to decorate the interior in a fitting manner. Various schemes were suggested, but it was not until the eighties of last century that Wren's original idea was carried out, and the eight spandrels of the cupola filled in with mosaic. This work was executed by Salvialti from designs by leading British artists. The gigantic figures of St Matthew

Loggia of Psyche. Palazzo Farnese, Rome.

The old German Chapel, St. James's Palace.

and St John are by G. F. Watts; those of St Mark and St Luke, by Brittan; those of Isaiah, Jeremiah, Ezekiel and Daniel, by A. Stevens. On the lower quarter at the shorter side of the octagon supporting the dome are mosaics by Sir W. B. Richmond: the N.E. represents the Crucifixion, the N.W. the Resurrection, the S.W. the Entombment, and the S.E. the Ascension. The vaulting and walls of the choir have been decorated in *smalto,* or glass mosaics, from designs by Sir W. B. Richmond. On the central panel over the apse is Christ enthroned, to the right and left stand recording angels. On the panels between the stone ribs of the roof in the apse, as well as the adjoining bay, are six figures of the virtues: Hope, Fortitude, Charity, Truth, Chastity and Justice, all appropriately symbolised. In the upper windows of the apse we see the twenty-four Elders of the Revelations, with attendant angels. In the adjoining bay are panels with pictures of Noah's sacrifice and Melchizedek blessing Abraham. Above these are large panels showing the Sea giving up its Dead. In the ceiling of the choir are saucer domes

over each of the three bays. The mosaic in the easternmost dome represents the Creation of the Birds, and the others represent respectively the Creation of the Fishes and the Beasts. On the four pendants in each bay are Herald Angels with extended arms; while in the spaces between the clerestory windows on the north side are the Delphic and Persian Sybils, Alexander the Great, Cyrus, Abraham, angels, and Job and his three friends; on the south side are David, Solomon, Aholiab, Bezaleel, Moses and Jacob. Adorning the spandrels of the arches of the east bay are angels with the instruments of the Passion; on those of the central bay, the Temptation and the Annunciation; and on those of the west bay, the Expulsion from Paradise and the Creation of the Firmament. In rectangular panels above the organ, Adam and Eve are shown in the garden of Eden. The colouring in these mosaics is good, though without the brilliance of the early Byzantine work, partly owing to the deeper tones, the larger admission of the tertiaries and more sparing use of gold. The method adopted is quite in the old style: rather

coarse work in details, with perfect design. In this way a very pleasing effect being secured for decorations placed in such position and at such a height. The modern, smoother method, with very close joints, would not give the natural effect with mosaic pictures.

CHAPTER X

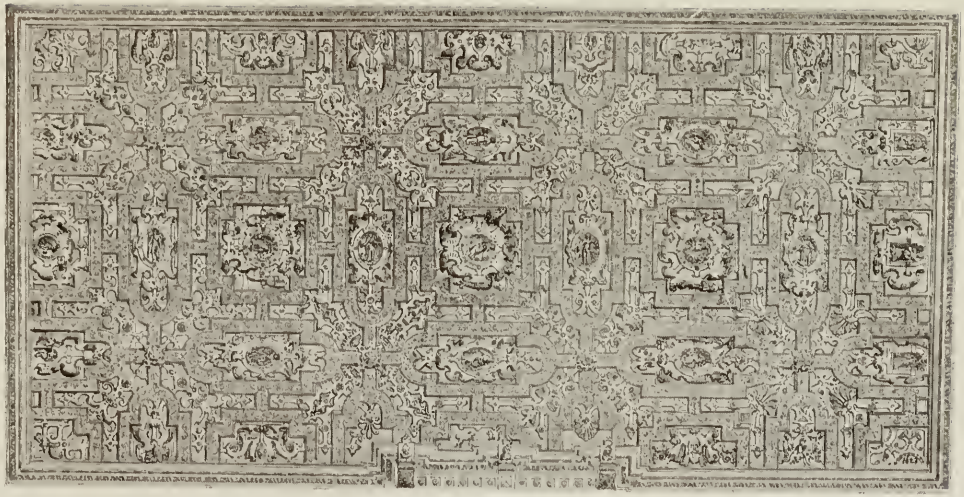
PLASTER WORK

PLASTERING, if not as old as the hills, is, in its primitive type, at least as old as the first attempts of non-cave dwellers to build themselves weather-tight huts. From the practice of daubing an outer coating and an inner lining of unctuous mud on wattle or rough stone huts, to the discovery of the superior merits of slaked lime for the purpose, is but a step or two in the long march of art progress. At all events we find plaster—lime alone or as an admixture—being employed in Egypt, not only for the purpose of providing a smooth surface, but as furnishing a means to decoration, a surface which could be ornamented with sunk or raised patterns and the application of colour. The Greeks early recognised its merits, using a fine, hard stucco, probably of marble dust foundation, which they placed on walls both inside and outside their temples, and no doubt on the ceilings.

They, through Etruscan intermediaries, introduced it to the Romans, who seized upon it gladly as affording them facilities for carrying out those lavish schemes of decoration of which they were so fond. Evidence abounds of their extensive adoption of lime stucco for adorning private and public edifices, both within and outside the borders of Latium proper. They produced a plaster of wonderful brightness, almost translucent, and of great durability. They moulded and carved it, decorated it with raised and incised patterns, gilded and painted it, and placed it in combination with costly materials. Vitruvius, writing in the first century B.C., gives elaborate directions how lime stucco is to be prepared and applied, clearly dealing with common and widespread practices. While advising the selection of cypress, olive, heart of oak, box or juniper for ceiling joists, as least liable to decay or warp, he insists that lime for stucco should be air-slaked, and allowed a long time for maturing, moreover, that it should be pure white and unctuous. Very beautiful work in low, medium and high relief was carried out

with this stucco on vaults and ceilings as well as on walls. The art of decoration with stucco travelled eastward with the migration of the Imperial Court to Byzantium, and flourished there for a time, but soon lost its prominence as the Byzantine style was evolved.

In Europe the same forces that replaced classic architecture with the Romanesque and Gothic, tended to dethrone stucco from its eminence. But plain plastering, such as that described as carried on at Mount Athos, must have been very efficiently practised right through the Middle Ages, as is evident from the extensive pictorial decoration on brick and stone walls and vaults, which necessitated a smooth, unbroken surface. With the Italians something more than a mere tradition of the past glories and the possibilities of stucco must have lingered, for right through the fifteenth century we hear of attempts being made to introduce some lasting form of plastic material for mural decoration and modelling. Donatello, for instance, used crushed brick and glue for modelling statuettes and plaques. Then Bramante,



Plaster Ceiling from Boston House, near Brentford.

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Raphael's uncle and architectural tutor, produced a white plaster, with which he embellished houses inside and outside. It is important to remember this, for he had great influence on his nephew, and one of his assistants was Jacopo Sansovino. To some extent, therefore, Raphael and his co-adjutor, Giovanni da Udine, when they received the commission to open up Nero's Golden House, were prepared for a great revival in decorative art. While Raphael was struck with the beauty and variety of decorative motives, Udine studied the stucco, which remained as hard and brilliant as when first applied. No doubt, too, the translation of Vitruvius' manuscript on the art of building put them on the right road, and so a very good imitation of the old stucco was available for the decoration of the Vatican and other buildings in Rome. When Raphael died, he left Guilio Romano and Giovanni Penni as his executors, with the duty of completing the works he had begun. They had formed quite an important school of stucco modellers and painters, which was dispersed after the sack of Rome by Francis I. of France.

Udine went to Florence, Sansovino to Venice, Romano to Mantua, Pierino del Vagua to Genoa, where public buildings and private palaces were soon adorned with staircases and chamber ceilings, gorgeous with painted and gilded stucco work. Every Court in the peninsular competed for masters of the art. Moreover, the Courtiers and Generals of Francis, with the travelling prelates, spread abroad a longing for the fashion. Francis begged of the Duke of Mantua that a competent master of plaster work should be sent to him, and Francesco Primaticcio, who had graduated in the school of Udine, at Florence, went, and to him are due the superb ceilings and deep friezes which are the chief glory of Fontainebleau. Primaticcio was not only an accomplished draughtsman, but an artist of merit and considerable originality. His designs were classical, and showed a lavishness in detail, but without the unbridled luxuriance of later men. In execution he was bold, modelling in high relief, and as far as friezes and overmantles are concerned, almost in the round, especially in the case

of figure work, which have all the finish of sculptures. Influenced by the old school of realists, yet formed on a study of the antique, he evolved quite a marked type of beauty, his large and small semi-nude figures being tall and slender, like those of Cimabue and his school, but with all the idealism of classic sculpture, together with perfect ease and naturalness of pose and grouping. His idea of beauty for the human form had more lasting influence on French art than had his taste in purely decorative designs, as we see if we compare the fine work he, and other Italian plasterers of this and immediately succeeding reigns, executed in France, with the ceilings and friezes to be seen at Versailles. Following the fashion in Italy and even outdistancing it, plaster work in France became more and more sculpturesque, great panels and deep sunken coffers being richly decorated, surrounded by heavy frames, and the whole encircled by huge masses of far protruding modelled plaster figures, garlands and trophies.

In England, plastering came down from Roman, if not pre-Roman times. We

know that it was extensively employed. Remains of quite fine plaster have been recorded in churches of the Romanesque and Transitional periods. It is quite obvious that for domestic buildings it must have been in even more general use. We find, for instance, that after the destruction by fire of London Bridge, with its superstructure of shops and dwelling-houses, King John ordered all houses on the Thames-side, as well as all houses wherein ale was brewed or bread was baked, to be plastered both inside and out, as a precaution against conflagration. This plaster was fine enough to permit of walls being painted in distemper, and later in oils. There was a large and competent body of craftsmen-plasterers—known as pargeters—whose guild was powerful enough to be recognised and receive a charter from Henry VII. They used plaster both on the outside and inside of houses, covering the blank spaces on the half-timbered building with repeat patterns, either slightly raised or with sunken lines, which were carved with trowel and style, or impressed by stamps.

Therefore, when that art loving, enigmatic personage, Henry VIII., fired by the example of his rival, Francis I., induced Luca and Bartolommeo Penni, brothers of Giovanni Penni, to come to England, these Italian experts found themselves confronted by a native school of plasterers. The brothers, with other of their compatriots, were chiefly engaged on the embellishment of the Palace of Nonsuch, which Henry built at Cheam. It is noteworthy that this vast pile, with its two quadrangles, which foreign visitors of renown, as well as English connoisseurs, regarded as a marvel of beauty, and the very acme of refinement, the *ne plus ultra* of plaster work, was essentially English in style, for it was a half-timbered edifice. This being so, it is possible that though the brothers Penni adorned the King's side with stucco figures in medium relief larger than life size, representing the Labours of Hercules, and the Queen's side with similar figures of naked females, in decorative detail, they had to conform to local taste. That was certainly the case at the Hampton Court of both Wolsey and Henry, which was

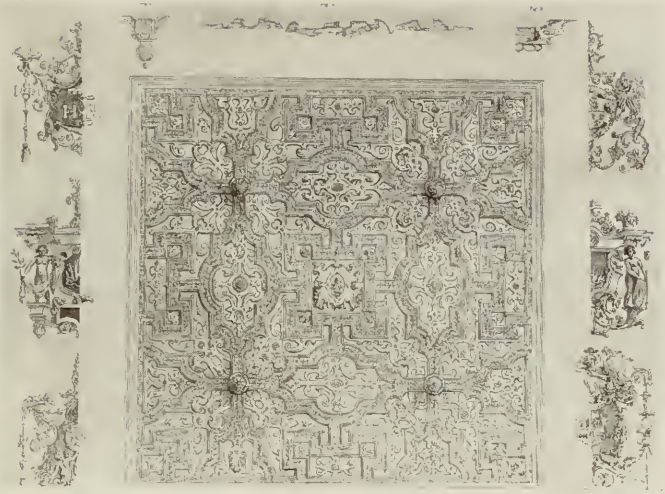
almost pure Gothic, with just a quaint infusing of classical detail or influence here and there. In fact, the brothers Penni, like Gerome da Trevisa, Ricciavelli and others, found in England a strongly individualised domestic Gothic, which rather baffled them. They were even at a loss to provide a suitable stucco, and had to fall back on a paste of rye meal. In France and in other Continental countries, the Romanesque still prevailed to a large extent, and undoubtedly influenced their domestic Gothic, thus furnishing an easy path for the classicism of the Renaissance. So, while the Continental plasterers, but more particularly the French, early developed the florid exaggerated inherent in the revived style, our pargeters working amidst more distinctly national architectural surroundings, and moreover, shut off for many years from free intercourse with Italy, elaborated plaster ornamentations on lines of their own. They had learnt from the Italians the possibility and merits of using plaster as a substance to be moulded and modelled, but in the main they remained craftsmen, handling the plastic

material and colour with great skill, though rarely attempting to follow their foreign masters in the higher flights of their art—the sculpture of figures, leaves and flowers.

Usually they regarded plaster as a means for surface decoration, with strict limitations, and did not attempt to reproduce the art of the sculptor of stone or the carver of wood. The imitative came at a later, less virile and less fruitful period. But the work at Nonsuch and Hampton Court created a furore for more decorative plaster work, especially for ceilings, than had been in vogue with the old pargeters.

During the Tudor period plaster-work designs were chiefly based on geometry, combinations of squares, oblongs, circles, ovals, octagons, diamonds, often interlaced, forming stars and intricate labyrinths. Many of these squares had radial ribs intersecting the points, and these ribs were sometimes arched to form pendants, reminiscent in design and elaboration of the best stone and wood carvings, as, in fact, much of the rib work itself was sug-

gested by the old timber ceilings. Quite frequently this elaborate strapwork—for the geometric patterns were carried out in solid or outlined bands, at first with sloping sides, forming a sharp apex, and then flat—was associated most effectively with purely Gothic surroundings. For instance, vaulted and groined ceilings, from which the floral pendants hung with natural grace. Indeed, the pendant, small and large, which may be a mere swelling of the intersecting ribs, or foliaged bands developing into great bursting buds, even pierced *à jour,* at other times conventional structures, sculptured and ornamented with heraldic devices, became a distinguishing feature of English plaster work, replacing the rose and mask or alto-rilievo sculptures of Continental practitioners. Greater variety and complication came in with the introduction of Celtic curvilinear knot tracery. The Renaissance influence is seen in the occasional resort to scrolls, but more particularly to the manner in which the ribs and strapwork developed. At first plainly moulded in the style of wood panelling, the ribs and patterns are



Ceiling, Manor House, Boston.

Chapel Ceiling, Sir P. P. Pindar's House.

gradually flattened, the edges moulded, and decorated on the surface with small ridged longitudinal lines, or with running floral patterns, generally carried out by means of revolving stamps, or dies like those used for marking patterns on butter. Sometimes the geometric patterns are skeletonised, as it were, the space between the two parallel lines being filled in with small scroll work, a series of four-leaved flowers, or leaves close packed, as in the classic type of wreath. The pendants themselves may be architectural in form, with small columns, standing on bases, capped by Doric or Corinthian capitals, even supporting pediments and sheltering small figures. On the other hand, heraldry is employed with a medieval freedom of handling and feeling—coats of arms, badges and devices were welded in as part of the pattern, quite frankly as essential to the scheme, without the elaborate harmonising frames and accessory scrolls seeming to ensist a foreign body, as is the manner of Continental artists, or as blatant interferences, quite useless to the development of the design, as was the method of

our own late seventeenth century and eighteenth century Renaissance men. As the designs became more complicated colour was largely abandoned, and in Elizabeth's later days only a little gold, together with the vivid heraldic emblazoning, gave that touch of polychromism which had delighted alike the medievalist and the men of the early Renaissance.

With the Jacobean period there came a more decided return to Renaissance ideals. Cheek by jowl with the native geometrical and curvilinear knot tracery, ever growing in elaboration, the floreated scroll made its appearance, and greater use was made of both human and animal figures. Decorative enrichment of panels was carried boldly into the raised traceries, so that every inch of the ceiling was covered with decoration, which was made to harmonise with the wood-panelled walls by means of deep friezes, having between mouldings, masses of plaster ornaments impressed or hand modelled. A keen appreciation of this art rapidly spread all over the country. We find it as much a part of domestic architecture in the South of England, the

West Country, East Anglia and the North as in London itself. It is used as lavishly in the homes of wealthy merchants and prosperous graziers as in the comfortable manor houses and splendid mansions of the nobility, while James' courtiers introduced it into Scotland, where it was welcomed, being finely handled by the Scots, who, however, never seem to have developed a style of their own. Jacobean architecture is, as we know, a happy blend of the Gothic with the Flemish, touched by a reflex action of the Palladian style, and to this, plaster work was as naturally allied as to the half-timbered houses of the immediately preceding age. A suggestion from this older form is frequently seen in the great beams of the ceilings, which instead of being concealed were left apparent. Sometimes they were slightly carved or painted, or were coated with plaster impressed with running designs, while the sunken panels between were covered with decorated plaster, the whole combination giving excellent results. Of the abundance then produced we have numerous fair examples remaining. Indeed, so nume-

rous are these splendid specimens up and down the country that we cannot follow our usual course and describe individual examples, nor would this serve any useful purpose, where general tendencies are of more importance.

This golden age of native plaster work suffered an eclipse in the following reign, for Inigo Jones' influence with Charles and his nobility was the means of introducing a still more decided leaning towards a severe classic style. Jones, though no slavish copyist of the Renaissance, was a thoroughgoing admirer of Palladio and his school. He simplified geometric patterns, and in place of ornamental strapwork a curvilinear design, introduced formal classic mouldings, superceding arabesque scrolls with precise foliage arranged in the rather stiff style seen in sculptured monuments and bronzes of the ancients. The carving, or rather moulding, for a more mechanical method had ousted hand modelling, was distinct, but the mass of decorated plaster was generally kept low and arranged in frames surrounding large and small panels reserved, as a rule, for

paintings. His decorative taste though formal was pure, harmonising well with his stately architecture. His imitators, however, became far too formal, replacing Jones' natural flowers and leaves with not over pleasing conventionalised forms, blemished, moreover, by the inappropriate classic trophies (breastplates, greaves, helmets, lictors' bundles of rods and axes and Roman standards), and unmeaning architectural details. An undoubted deterioration followed the increasing use of mould and stamped decorations, prepared elsewhere and then fixed to the ceilings. With the purely formal mouldings of Jones this procedure could be resorted to safely enough, but it was otherwise when greater exuberance came in, and when plaster was applied in heavier masses.

Puritan feeling under the latter part of the reign, and under the Commonwealth, tended towards excessive simplification, and the little plaster work of this period was of the severely straightforward strapwork type in conjunction with plain panels between ceiling beams.

A rebound came with Charles II. Sir Christopher Wren, although quite as classic in feeling as Inigo Jones, brought a gayer, freer note. He frankly discarded old Tudor traditions, using large panels with broad, heavy frames of deeply carved plaster, sometimes in the form of complicated mouldings with decorated hollows and beadings, but more commonly composed of masses of flowers and leaves. He used the oak, bay and acanthus largely, but his whole floral design is away from the conventional, and a direct reproduction of Nature. His workers were both Italians and Englishmen, like Grinling Gibbons, who, however, were all imbued with the Renaissance feeling, in which a reminiscence of arabesques is curiously mixed with very close studies of Nature. Some figure work was introduced, though development in this direction was left to his successors.

After Wren came a constant stream of Italian artists and Italianated-Englishmen, who forced the classical note, overburdening their ceilings with massive, deeply undercut scrolls, arabesques and frames, the panels large and small being filled in

with paintings and miniatures. Plasterers became essentially carvers, and, while much of the detail was exquisite, individual flowers and fruits being perfect of their kind, the general scheme of design suffered. Colour was once more the rage. With plaster, however, it is mostly a question of feeble washes, with deeper tones and gilding for enrichments. Full-bodied colour is used in the heavy mouldings, and on certain coved ceilings ornamented with deep coffers, bearing a raised flower or star in their centres. Elaborate figure carving for both ceilings and friezes became the rule. Alas! the work is almost always without the vigour of a Sansovino or the grace of a Primaticcio. The human form, especially the favourite, not to say fashionable, *amorini,* grew chubby, with a suggestion of the squat, so sliding into the uninterestingly vulgar. This frenzy for over-elaboration, for loading ceilings with great sprawling masses of tortured plaster, was abated for a time by a return to rectangular formalism under William III. and Queen Anne. Indeed, in minor buildings in the Queen Anne style, which was

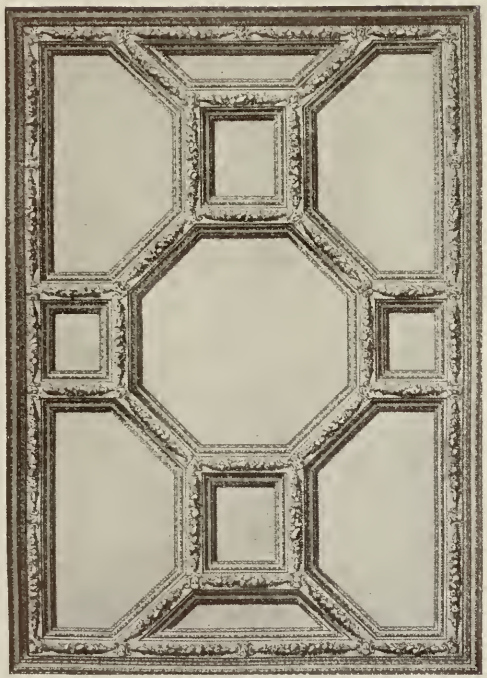
a semi-Dutch, semi-Jacobean, had a considerable vogue. Italian influence dominated in the long run, and under such men as William Kent and his followers the bastardised Renaissance ornamentation was carried very far.

All this, however, was extremely costly, so there was a tendency to revert to a Puritan lack of decoration amidst semi-classic surroundings, which sounded a note of incongruity. The result was that a new school arose, preferring to go back for inspiration to the masterpieces of Greece and Rome. Prominent in the vanguard of this movement were the Adam brothers, who drew constant supplies of classic drawings from correspondents in Italy. Robert Adam's claim to recognition as a reformer and as a contributor to our art progress, rests chiefly on his insistence upon a building being treated as a whole by the architect, who, he held, should design the decorative scheme to suit the shell. So he not only drew plans and elevations, but designed doors, fireplaces, mural and ceiling decorations, and even furniture. Unfortunately he had studied in Italy the

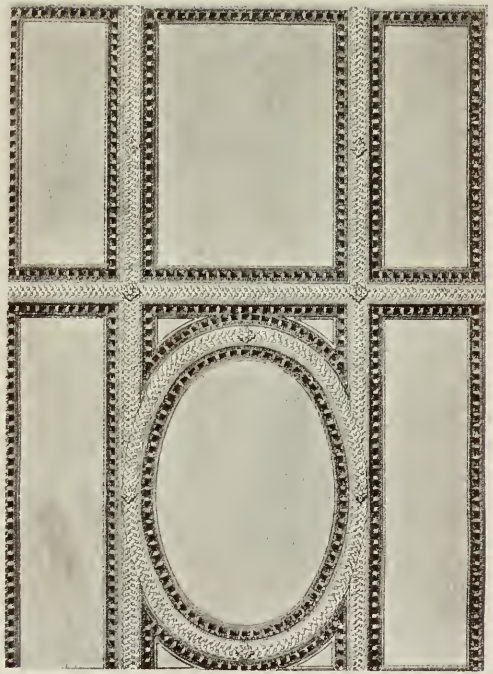
school of Renaissance in its third stage of decadence, when the exuberance following on Raphael's effort and the almost fœtid exaggeration following on that, had given place to the puerilities of exhaustion. With Adam and his numberless imitators (among whom we may single out Colin Campbell and Richardson) we have the low relief frames and conventional floral patterns or classic mouldings. These enclosed panels filled with miniature paintings, while the free spaces are covered over with a meander of scroll and arabesque work, either in low relief or merely painted, generally in tertiary colours on muddy-tinted washes, intended, no doubt, to throw up the miniatures of Angelica Kauffmann and lesser lights, though actually having the effect of making their brilliant colouring positively garish. But, as a matter of fact, for one Angelica Kauffmann there were hundreds of poor draughtsmen and wretched daubers, who covered their ceilings with a motley crowd of nudities only fit for the attention of the pathologist, as we see in so many of the Campbell and Richardson productions. This school had

a weakness for pentagons and octagons of irregular formation, often with incurved, outlines, and also for fluted fan ornaments placed in angles of rooms or alcoves. Adam used plaster for the flat spaces, but a secret composition for his stucco ornaments; this gave him a practical monopoly for the less expensive type of work. The secret was ultimately discovered, opening up wide competition. Meanwhile a class of plaster moulders in situ, and producers of mouldings, sprang up, who showed considerable manipulative skill, among these being the Roses, a London firm, though they carried out work for Richardson and others all over the country. The craftsmanship was good. Unfortunately it was divorced from invention, these modern craftsmen, unlike their Tudor and Jacobean forerunners, having to depend for designs on artists whose pretensions were in inverso ratio to their good taste and their ability to construct a reasonable scheme of decoration.

Some idea of the general prevalence of fine art plaster work in the mansions of the eighteenth and early nineteenth centuries



Plaster Ceiling at Houghton. Isaac Ware.



Part of Plaster Framing on Ceiling of Banqueting Hall, Whitehall

may be gathered from glancing over the illustrations of Mr Chandler's "Private Palaces of London."

We have mentioned that the Penni brothers when decorating the Palace of Nonsuch are credited with having used a paste of rye flour. This was, in fact, a form of gesso. The Italians had long used colour pastes, *gesso sottile,* a mixture of whiting in a gluey medium, and *gesso duro,* a mixture of plaster and glue. The former was applied with a brush to form slightly raised enrichments; the latter was applied more as a pliable paste. These were often coloured before application, during the process of mixing, the process thus corresponding to the methods of Donatello and those employed by the Egyptians, who used tinted clays to decorate mummy cases and so on. Gesso was largely employed throughout the Renaissance period, and was revived in the nineteenth century by such decorative artists as Walter Crane (who boiled one part of powdered resin in four parts of linseed oil and six parts of glue, and then added enough whiting—previously soaked

in water—to form a thick cream), and others used the same mixture, but without the resin, or plaster dissolved in glue with a little oil. This was applied with a brush, either previously tinted or to be painted after application. One method of using gesso was to lay on successive layers, making a raised block within the outlines of any figure, and then scraping away superfluous material with a kind of scalpel, so that it combines the arts of the painter and the sculptor. In old practice, where high relief was needed, if the foundation was wood, this was carved away so as to leave rounded surfaces, or rough ingrossments of the design, which were afterwards covered with gesso; or the foundation might be of coarse plaster, covered with gesso. It will be seen that method differed with stucco work, though its result in low and medium relief was much the same, but with softer outlines. Other variations were compositions of different descriptions used in moulds to produce light castes; or *carton pierre*, that is a form of papier mâché, thin paper being soaked in glue until almost a paste

and then pressed in successive layers into moulds. Casts thus produced were extremely light, took coloured varnish well and were easy to fix on ceilings or friezes.

If we take a broad survey of plaster work in England we find three schools. First we have the Tudor or Jacobean periods, characterised by geometrical foundation in design, carried out in medium or high relief by means of broad bands, curvilinear tracings, with floral additions, a comparative moderate use of the human figure, of birds and beasts, but on occasions a lavish resort to heraldic embellishments. Then we have the classic sculpturesque style, formal and restrained with Inigo Jones, florid with Christopher Wren, and exuberant with their successors. Finally the decadent style represented by Adam and Richardson.

There can be no question that it first lent itself admirably to domestic architecture, it was easy for it to be suited to the needs of each milieu. A simple, open pattern in low relief for small, low, plain rooms; greater freedom of outline, with

enriched members of considerable projection—even developing into monumental pendants—for lofty rooms of great extent. Grafted on to a Tudor Gothic and the later Jacobean and modified Dutch Queen Anne, it is really, in its simplified form, at home amidst almost all surroundings. It is far otherwise with the sculpturesque style, which is only adapted to large and lofty rooms of considerable pretensions, and even then looks heavy unless the wall decorations and furnishing are in keeping. As for the decadent style, it is finicking and tiresome, at its best only suitable for a boudoir or a breakfast-room. Even when refined by a severe process of elimination and inspiration from the formalism of Inigo Jones—a combination, if we accept a few characteristic ornaments, practically forming the Empire style—it is too precise, too "genteel" to be accepted as satisfactory.

CHAPTER XI

EARLY PICTORIAL CEILINGS

We have already dealt in general terms with the custom of painting ceilings, both with conventional patterns and finished pictures. As we have shown, probably the earliest attempts along this particular line of decoration were the representations of the ceilings as the firmament, with twinkling stars, to which were later added symbols of the Zodiac. This naturally led to a fuller development of the idea, the Greeks showing us the denizens of Olympus and the Romans glimpses of their more widely embracing Pantheon. The Roman love for their gardens soon suggested the trellis work with trailing vines, of architectural figures, such as columns and pilaster united by pediments and cross beams, each bearing clusters of flowers, leaves and

fruit, so that in the end we had both medleys of horticultural and fantastic ornaments, "like an Italian garden," as already quoted.

While early western Christian art was rather restrained as regards the introduction of figures and "set pieces" for ceiling decoration, it was otherwise with the Byzantine artists, who, however, had their own hard and fast rules, far removed from classic practice. But they treated both walls and ceilings as broad spaces suitable for pictorial decoration. Their methods persisted for many centuries, and afford a link with the early Egyptian decorators. Robert Hendrie, who wrote at once as a chemist and painter of no mean attainments, in the introduction to his translation of "An Essay upon various Arts, in three books of Theophilus, called also Rugerus, priest and monk of the Eleventh Century," gives many interesting particulars of painting in fresco and tempera. He quotes Didron on the methods of painting on walls, as pursued by the monks at Mount Athos. Briefly, the artist monk had assistant monk painters and boy

apprentices. Two coats of lime were laid on the wall; firstly, half an inch of very fine mortar mixed with chopped straw; secondly, a mere pellicle of the finest mortar mixed with cotton or flax. Three days were allowed for the two coats to dry, then the master lightly outlined the design in red. An assistant followed, filling in the outlines with black pigment. On this a superior assistant traced the draperies and ornaments, and formed nimbuses round sainted heads. Once more the master appeared, coating all the flesh parts with brown, then with yellow deadened with black, and a second coat of yellow to lighten the flesh, and a final coat of very light yellow, though all through shadows were left black or lightened with one or more yellow washes, thus depth being secured. The shadows were outlined with blue and painted over with green, and a rose colour completed the main part; the lips, eyes, hair being filled in nearly the last. All this time the nimbus was used as a palette, on which the artist tried the effect of his colours. Three days were allowed for the colours to dry, and then the

nimbus and parts of ornamentation were gilded. Rectifications and even considerable modifications of design were possible almost to the last stage.

This is, of course, what in modern times has been named tempera painting (the art side of distempering), and is what was practised in ancient Egypt, Babylonia, Nineveh, Greece and Rome. It involved the mixing of the pigments with a glutinous medium (that is, white of egg, size or gum) to prevent the colours sinking and fading away, or running one into the other. Many preparations have been advocated by different schools. As a rule the Italians added the milky sap of fig trees; the Germans had resort to a mixture of vinegar and honey. The characteristic of tempera is sharpness of outline and some hardness, for the colours dry quickly and there is no blending, except by direct mixing, or by the working of one transparent colour over another. In later times it became the fashion to protect tempera with an oil varnish, giving the finished work much of the quality of oil painting, with its depth and brilliancy.

These qualities of depth and brilliancy were attained by the ancients with an encaustic method, in which pigments were mixed with melted wax or resins, applied hot to plaster, stone or wood. It is, however, one of the lost arts, and the exact procedure is unknown. Of late it has been suggested that the softened coloured waxes were placed on the surface and spread by means of heated spatulas, thus securing a certain amount of blending.

At the Renaissance a close study of classic art treasures led to at least a partial discovery of what contributed to the durability and beauty of ancient plaster. It was found that the top coating consisted entirely of, or contained much fine marble dust. This was the quick-drying stucco, which hardened with a bright polished surface. It was discovered, too, that if this substance, or any nearly pure lime plaster, was painted on while wet, a permanent stain resulted, and the painting retained a softness and limpidity unattainable by any other method. This is fresco painting, and requires great skill, because rapidity of execution is absolutely necessary, and

retouching can only be carried out sparingly with tempera colours. The usual preparation for fresco painting is to use a fine plaster of slaked lime (matured for at least a year) mixed with sand. Over this a thin layer of very fine plaster is spread, and as quickly as possible a third layer is added, but only as much surface being laid on as can be painted in one day. The design is usually drawn with charcoal on cartoons and then pounced or pricked on the surface to be painted. Only earth and mineral pigments are used, ground in water, and are laid on rapidly, sinking in. The process of drying is effected by carbonic acid formed in the plaster, expelling the water in the form of vapour, and during this process a thin coating of carbonate of lime is formed on the surface protecting the colours. It is not possible to add wash upon wash, as this produces "sweating," and a disintegration of the plaster. Colours are always to be prepared several shades darker than are required in the finished picture, because the colours lighten during the process of drying. All the top plaster not painted upon during the day has to be

carefully cut away, and a new layer as carefully laid on when the next day's work is being taken in hand. Touching up, must, as we have said, be carried out *a secco,* but this part of the work is not permanent and detracts from the purity and transparency of the rest of the colour.

It was in this fresco medium that Michel Angelo, Raphael, and all the great men of the Renaissance, down to the end of the Cinquecento, painted their walls and ceilings, practically ousting tempera for all better-class work, for the results attained outweighed the tremendous difficulties involved. It will be seen, however, that for ambitious decorative art work, this is a medium only suited to those who are at once masters of outline and colour, and possessors of quite specialised dexterity. In the hands of the mediocre, except where board effects with washes and simple conventionalised patterns are sought, it is a fatal medium. A return to tempera for general use was inevitable. But for a time both methods were obscured, when towards the end of the fourteenth century, colours began to be ground in oils and applied in

thin or thick washes. This enabled even poorer surfaces than those required for tempera to be used, and the artist could work at his ease, take his leisure, secure almost the same limpidity as with fresco, and all that richness and brilliancy the lost encaustic method gave.

Both tempera and oil painting suffered from the disadvantage of pealing or flaking off under certain conditions, such as dampness penetrating to the plaster from outside, dessication of the surface under great heat or chemical action.

It will be impossible in a work of this kind to give anything approaching a *catalogue raisonné* of pictorial ceilings. We can only deal with general tendencies, refer to typical specimens. As we have seen, during the pre-Christian era, the treatment of ceilings was almost purely decorative, with the comparatively rare admission of more realistic treatment of the heavens, or overhead gardens. In early Christian art figures and even scenes were admitted, but the treatment was conventional, the figures being somewhat angular, flat, and without any attempt at foreshortening, and perspective was neglected. Towards the end

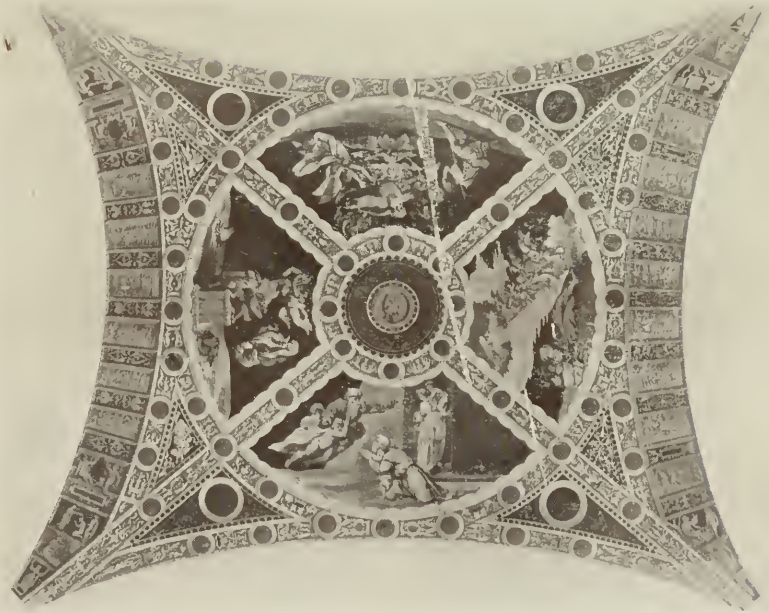
of the Middle Ages the treatment was bolder, with decided leaning towards realism, but the composition was usually poor. Figures mostly appeared as isolated studies, even when grouping was attempted there was little cohesion in the scheme, practically no shading.

Just prior to the Renaissance, realism was beginning to be softened by imagination, by that selective and emphasising faculty of the artist, whose aim it was to represent the outer world as it impressed itself upon his mind. It was a return to that power and finish brought to such high perfection in the best period of Greek art. Perugino was one of the first masters to display skill in applying his knowledge of perspective and appreciation of distance. With these acquisitions, a study of anatomy, a bolder treatment of the human form, and recognition that the position to be occupied by the picture relative to the spectator had to be taken into consideration, great strides were made. Pictures were considered as a whole, the balancing of composition, natural grouping, and foreshortening became necessary. While the Byzantine

generally treated pictures on walls and ceilings as miniatures, framed by running patterns or highly decorative designs, the medievalists covered more space, and were content with modest framings. With the Renaissance pictorial treatment was generally advanced, but it coincided with a very vigorous cultivation of decorative accessories, and we find both large and small pictures on ceilings treated as separate works to be set off by gorgeous mouldings and arabesques. We see this even in the work of Michel Angelo and Raphael. In Michel Angelo's superb work on the ceiling of the Sistine Chapel, unity is given to the whole scheme, embracing a large number of pictures, by treating the space architecturally. The columns, arches, entablatures and sculpturesque figures provide the necessary link. With Raphael's work at the Vatican, in the Loggia and Stanze, or State Apartments, this unity is attained chiefly by a lavish use of symbolism, the great wealth of arabesques and decorative items being directly connected with the scenes depicted. Even foliated scroll work, surcharged as it often is with

grotesques, is treated in a way to carry the eye from scene to scene, merely emphasising the break to separate event from event, while keeping up the sense of continuity. In the Stanze this exuberance of decoration is not so noticeable as it is in the Loggia. On the ceiling of the first of the chambers, the Camera della Segnatura, great medallions are filled with beautiful figures representing "Theology," "Philosophy," "Poetry" and "Justice." In the Stanza del'Eliodoro the ceiling is adorned with four large panels representing the promises of the Almighty to Noah, to Abraham, to Jacob and to Moses. Raphael treated his subjects with considerable liberty with a view to decorative effect and the position occupied by the pictures. For instance, in the first panel Noah's children are shown quite young, thus permitting delightful grouping. In the Abraham panel in place of the usual ram entangled in bushes, we see an angel flying down to arrest the patriarch's uplifted arm with the knife, while a second angel floats down bearing a lamb in his arms. Both in the Jacob and Moses panels, accessories are simplified in

order to give a striking central motive. The stucco framing of the panels is extremely rich. Thirty-two small cartouches bear allegorical pictures to connect the great pictures with the scenes from the Apocrypha painted on the walls. In the centre of the ceiling are the arms of Pope Julius II. surrounded by elaborate floral designs, while most fanciful arabesques spread over the rest of the ceiling, knitting the whole together. In the frames we see twice repeated two winged boys supporting the arms of Julius II. The colouring is very rich, gold frames on light blue ground, relieved by pinkish brown and chocolate brown ornaments. In the frescoes the sky is dark blue, the flesh rather browny red, and strong colourings form the scenery and drapery. In the Stanze dell Incendio the ceiling is a glorification of the Trinity by Perugino. The ceiling of the Sala Constantina was probably executed by Raphael's pupils and Sodoma. It represents a triumph of Christianity over paganism. On the pendentives are Italian landscapes, and lunettes are filled with allegorical figures.



Ceiling, Stanza del Eliodoro, the Vatican, Rome. Raphael.

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In most of these instances the subjects are sufficiently conventionalised not to outrage the feeling for appropriateness, and the same can be said of the ceiling pictures by Cimabue, Correggio, and to some extent of Paul Veronese. But the tendency to decorate ceilings with elaborate pictures without much regard to subject and due treatment in respect to their position grew apace. Moreover, there was also an increasing neglect of unity, and consequently we find ceilings divided up by exquisite stucco embellishments, in which pictorial gems suited for walls of for easel pieces, are enchased. This was very noticeable with the combined work of Sansovino, Paul Veronese and Tintoretto in Venice, and with that of their successors. For instance, on the ceiling of the Grand Council Chamber in the Ducal Palace most elaborate, beautifully moulded and coloured stucco is used to frame fifteen panels, in which Tintoretto, Paul Veronese, Francesco Bassano and others, represent the glorious feats of arms of the Republic of Venice. The series is continued in the Hall of Scrutiny, the same treatment being followed. But

the natural desire is to take these down and place them within comfortable visual range on the walls. Quite a different effect was achieved by Paul Veronese with his Venice and St Mark glorified in Heaven. That is a splendid piece of decorative painting, quite suitable for placing on a ceiling. The same remark applies to this artist's Venice Enthroned, of which Ruskin says "one of the grandest pieces of frank colour in the Ducal Palace," and certainly most skilfully designed for its position.

Another of his pieces in this style is his Olympus on the cupola of an irregular octagon at the Villa Barbara. It is a crowded composition, in which we see fine nude and semi-nude divinities disporting themselves amidst fleecy clouds, the strong muscularity of the gods contrasting with the soft outlines and flesh colouring of the goddesses and juveniles, a composition in which perspective and foreshortening are a delight to all beholders. Returning to Venice and the Palace of its Doges, we can but admire, from this special point of view, and, indeed, despite criticism, for its general outstanding merits the central panel

on the ceiling of the Sala dei Pregadi, where Tintoretto has symbolised Venice as Queen of the Seas. "Notable," says Ruskin, "for the sweep of its vast green surges, and for the daring character of its entire conception, though it is wild and careless, and in many respects unworthy of the master. Note the way in which he has used the fantastic forms of the sea-weeds with respect to his love of the grotesque." A Paul Veronese of more doubtful value as a ceiling decoration is the Triumph of Venice filling the central panel of the Council Chamber of the Ten. Lanzi, amazed at the skill with which the crowded design is handled and the excellence of detail work, describes it in enthusiastic language. He says that Venice is shown "in regal attire, crowned by Glory, celebrated by Fame and attended by Honour, Liberty and Peace. Juno and Ceres are seen assisting at the spectacle, as symbols of grandeur and felicity. The summit is decorated with specimens of magnificent architecture and with columns, while lower down appears a great concourse of ladies with their lords and sons in various splen-

did habits, all represented in a gallery; and on the ground are warriors on their chargers, arms, ensigns, prisoners and captives of war. This oval picture presents us with a view of those powers with which Paul so much fascinated the eye, producing a general effect altogether enchanting, and including numerous parts all equally beautiful, bright aerial spaces, sumptuous edifices, which seem to invite the foot of the spectator, lively features, dignified, selected for the most part from nature, and embellished by art. Add to these very graceful motions, fine contrasts and expression, noble vestments, both for the shape and the materials . . . perspective that gives distance to objects without displeasing us when near, the most charming colours, which, whether similar or contrasted harmonised with a peculiar degree of art not to be taught." All of which is very true, but for its full enjoyment man must abrogate the dignity of his erect position, to lie flat on his back, or otherwise risk dislocation of his neck; in either case scarcely conducing to a proper frame of mind for the appreciation of a work of art.

Moreover, all such crowded compositions, with heavy architecture, restive chargers tramping over terra firma, impress the unreality too obtrusively on the mind. Admire them though we may as the fine productions of masters, they are examples to be eschewed, as dangerous to all but giants, and adding little even to their credit.

CHAPTER XII

PICTORIAL CEILINGS IN ENGLAND

ALTHOUGH we hear of mural painting in Medieval England, we have no evidence or pictorially decorated church vaults or palace ceilings such as we have in plenty in other European countries. Excellent carvers and colourists we had at work in great fanes and humble parish churches, but such painters of genre as we had in our midst scarcely turned their attention to ceilings.

It is to foreign wielders of the brush, quite late in our artistic development, that we owe the recognition of ceilings as available for pictorial treatment, a step which proved anything but an advance. Holbein, who designed the ceiling in the Chapel Royal, St James' Palace, is credited by Samuel Pepys with having also painted certain gallery ceilings in the Whitehall

Palace of Henry VIII., then (August 1668) in a most dilapidated condition. The diarist laments the general decay, declaring it was a "pity to see Holbein's work on the ceiling blotted on, and only [all?] whited over." No records, however, exist of Holbein working here, and as our worthy gossip was decidedly incorrect in other particulars relating to art, we may dismiss this talk of the great German as an idle rumour, but interesting as showing that some notable painting had been carried out in the galleries before the reign of Charles I. Hard by this spot, in Inigo Jones' Banqueting Hall, we have a remarkable painted ceiling. The Hall is a lofty one, measuring 110 feet by 55 feet, and Peter Paul Rubens was commissioned to carry out the work. He made elaborate sketches while in London for submission to the King, but the work was carried out by the master and his pupils on the Continent. The various panels are painted on canvas and held in place by heavy gilt frames. The subject is the Happy Life and Apotheosis of James I. There are six panels in all. The large

centre one is an oval in which we witness the apotheosis of James; the King, in his robes of the Garter, with full-bottomed wig and three-cornered hat being borne heavenward on the back of a Jovian eagle. His Majesty, with straddled legs, looks exceedingly uncomfortable in his perilous position. The panel is between two oblong canvases, representing respectively the good deeds of James I., and that King designating Charles I. as his successor. The oval panel is flanked by two squares, and the oblong panels by two ovals, filled with allegorical pictures. The colouring is beautiful, if somewhat brilliant, but we must remember that the canvases have undergone various restorations. Much heavy and elaborate architecture is shown in the paintings, the grouping being rather disconcerting to the star gazer, and, indeed, the perspective has been severely criticised. The figure drawing, with the difficult foreshortening, is admirable, a great task, for Smith tells us that "the children are more than nine feet, and the full-grown figures from twenty to twenty-five feet in height."

Dr Waagen gives a description and an appreciation of this scheme "which is divided into nine compartments. The largest, in the centre, of an oval form contains the Apotheosis of King James I. On the two longer sides are large friezes with infant genii, loading with sheaves of corn and with fruit, carriages drawn by lions, bears and rams. The proportions are so colossal that each of these boys measures nine feet. The other two pictures in the centre represent King James as the protector of peace, seated on his throne, appointing Prince Charles as his successor. The four pictures at the sides contain allegorical representations of Knightly power and virtue. These paintings, executed in 1630 by order of Charles I., gave one very little pleasure. Independently of the inconvenience of looking at them, all large ceiling paintings have an oppressive, heavy and considered as architectural ornaments unfavourable effect; for which reason, the refined taste of the ancients never allowed them; substituting light decoration on a light-coloured ground. Least of all are Rubens' colossal and heavy figures

adapted to such a purpose. All allegories are cold, and the overladen and clumsy character of these is not calculated to make them attractive, nor were the character and reign of James I. such as to inspire anyone with any enthusiasm. There is little doubt that the greater part was originally executed by the pupils of Rubens, while the deep, unctous, and transparent tone of the nude, and clumsy form of the chief pictures leave no doubt that Jordaens, especially, was employed on them." Sir Godfrey Kneller, who had in his possession some of the original sketches, is one of the authorities for the statement that Jordaens helped largely in painting these pictures, for which Rubens received £3,000.

Charles II., who during his Continental wanderings had imbibed a taste for the mock heroic in art, with its strange medley of mythological personages, allegorical figures and modern folk masquerading in the pomp of Augustus Cæsar, soon after the Restoration brought over Antonio Verrio to re-establish the tapestry works at Mortlake. This enterprise was never carried out, but Verrio, who had studied in

Naples, and was a kind of universal genius, was employed by the Earl of Arlington in decorating Euston. Struck by the daring gaudiness, Charles promptly set the Italian to work at Windsor. Fine old timber ceilings, others coved and decorated with plaster work or carved wood, were hidden by flat plaster ceiling, whereon as the Duke of Argyll says, "Verrio's flying and flitting angels whirled in chaotic allegory around the heads of kings enthroned in thunder clouds." Many of these have been removed revealing the better work beneath, but several specimens remain, and others deserve description. Among those which remain is a ceiling in the Queen's Presence Chamber, and another in Charles II.'s Dining-room, where we are shown a banquet of the gods, the cornice and frieze being heavily decorated with fish and game. His most ambitious work was carried out in St George's Hall, on the walls of which he painted the legend of St George and the triumph of the Black Prince. The ceiling he divided into panels by means of heavy plaster mouldings of foliage. The centre elliptical panel he

filled with a kind of deification of Charles II., who, seated amidst the clouds in the royal robes of the Order of the Garter, he pressed his right foot on the head of a lion, while Religion and Plenty crowned him, and angels and rays of light swept down towards him, England, Scotland and Ireland reposing at his feet, with Mars and Mercury in attendance. Two octagon panels contained elaborate groups of figures, representing the triumph of Charles, and in one of these a nobleman, not liked at Court, was represented as a friend dispersing libels. Verrio's efforts in the King's Guard Room was less of a jumble, more appropriate and truly decorative, for he filled compartments with figures of Peace and Plenty, Mars and Minerva, and again Mars with war symbols. In the Queen's Guard Room, a large oval in a coved ceiling, showed Queen Catherine as Britannia seated on a globe, receiving offerings from Europe, Asia, Africa and America. It is one of a long series of ceiling devices in which the Queen was granted heavenly honours by order of her erring spouse. In this instance the

design was fairly successful, the blaze of light descending on Britannia being splendidly contrived. In the Ball-room Charles was again in the clouds, this time represented as giving peace to Europe. Verrio's performances in the Chapel Royal, adjoining St George's Hall, was remarkable in many ways. The coved ceiling was painted with the scene of the Resurrection, not at all a happy effort. On the North wall the miracles of Our Lord were shown, and among the crowd stood Verrio and some of his familiars in contemporary costumes and full black wigs.

In this ceiling Verrio carried out a device not unknown to the early Renaissance painters, which he used with good effect on other occasions. The coves were divided into highly decorated panels, but the artist carried the sky and clouds from the central panels over the coves in straggling masses, with angels in their midst. Carefully done, this emphasising of the continuity of walls and ceiling is very pleasing, making an elaborate picture overhead more tolerable. Michel Angelo arrived at the same result in a different way, using architectural forms and sky.

Verrio, who had found time to reorganise the gardens at Windsor, and who had been made Master Gardener, with a home in the Mall, close to St James's Palace, became the rage, painting ceilings for noblemen in all parts of the country. He was employed by the Earl of Essex at Cassiobury, Lord Montagu at Montagu House, the Duke of Devonshire at Chatsworth, the Earl of Essex at Burghley (of which more at length later on), and others.

Both Charles and James kept him busy at Hampton Court, where much of his work, characteristic, but perhaps not of his best, is still extant. When William ascended the throne Verrio retired to the provinces, carrying out numerous commissions to decorate great mansions. For a long time he obstinately refused royal patronage, for he was loyal to his old masters. It was during this partial eclipse of the Italian luminary that a revival in better-class plaster work came about, characterised by a certain quaint Dutch formalism, suggestive of tulips and parterres. However, Verrio recognising that the Stuart cause was hopeless, grudgingly

accepted the commands of William and his Consort, resuming his labours at Hampton Court, where he associated Laguerre in most of his work.

It is at Hampton Court that we are confronted with one of his most glaring abuses of the mock-heroic, for the Grand Staircase presents a brain bemusing medley of mythology, allegory and history. We are bidden to attend the marriage of the Thames and Isis, over which preside Jupiter and Juno enthroned in the clouds, attended by Ganymede cup in hand, riding the eagle, while Juno's peacock stands in front, the splendours of the far-spread tail vieing with the vivid hues of the rainbow which canopies Diana. Within the charmed circle are Apollo with the nine Muses, haggard Fate snipping the thread of life, Pan with his pipes, Hercules leaning on his club, while Mercury brings forward Julian the Apostate. Elsewhere Ceres, offering wheat-sheaves, gods and goddesses, Nymphs, Naiads, Zephyrs, Satyrs, and Bacchanals are intermingled with genii, personifications of the Virtues and so on, while Romulus attends with his

shaggy foster-mother, and Aeneas introduces the twelve Cæsars. Then there are overflowing cornucopias, flowers and fruit, architectural features and much more besides, the crowded composition overflowing from the ceiling into the staircase walls. Most of all this is bad, for looking at it as a picture the colouring is harsh, the drawing defective, many of the figures loutish, and the whole conception chaotic. Yet if we look upon it not too curiously, this massing of colour, and rather clever treatment of light, is impressive, and yet again, as William Howitt says, though "the figures in general are too ponderous for their ethereal character and position, here and there your eye is caught by some shape of sweetest grace or countenance of sunny beauty." It is, indeed, a patchwork affair, with some delicious bits and quite excellent decorative details. And so it is with most of his compositions. Among his work here for Anne was the painting of the Queen's Drawing-room, the large centre chamber on the east front, measuring 41 feet by 25 feet. On the ceiling Queen Anne is represented in the

character of Justice, with scales in one hand and sword in the other. Her dress is purple, lined with ermine. Over her head a crown is held by Neptune and Britannia, while surrounding her, floating in the clouds, are various allegorical figures of Peace, Plenty and other pleasant attributes. For King William's State Bed-chamber he carried out a rather pretty concert : Endymion is shown reposing his head in the lap of Morpheus, Diana with crescent moon looking on admiringly, while Somnus and his attendants are seen in the background. There is a border of four dainty landscapes, each panel separated by nude boys with baskets surrounded by poppies. Decidedly quaint, though less excellent as a ceiling composition is the sleeping Mars seen in the adjoining Little Bed-chamber. Mars is asleep in the lap of Venus, and small cupids swarm around and rob him of his shield, armour, helmet, sword and spear, while others entwine his arms with wreaths and roses. The border is composed of orange, jasmine and other somniferous plants in ornamental vases, with parrots (the Oriental symbol of love)

and other birds flitting about them. Other ceilings of his exist here.

We have mentioned that the Earl of Essex employed Verrio at Burghley, a mansion possessing so many fine Elizabethan plaster ceilings with pendants. He treated the Grand Staircase ceiling in a way foreshadowing his subsequent design at Hampton. He took for his subject the hell of the classic writers, depicting persons whom he disliked (notably the old housekeeper and a neighbouring cleric) in most invidious positions. Indeed, he allowed great license to his pencil, introducing touches (fully described by Dr Peck in his "*Desiderata Curiosa*"), of extreme coarseness, just such touches as we see disfiguring much of the modern popular fresco work of Italy. Less offensive, but in equally doubtful taste, is the ceiling of the fifth George Room, which is described by Chalton thus : "In the centre are Jupiter and Juno, with the Zodiac over their heads. Below them are Ganymede, the eagle and peacock, Cybele, with turret on her head, drawn by lions, and attended by the Corybantes; and Ceres drawn by

dragons. To the right, Minerva is seen resting on her shield; and in various parts of the ceiling are depicted, Bacchus crowned wth the vine leaf, and Ariadne with the seven stars, Apollo, Diana, Hercules, Castor and Pollux, the Goddess of Sleep, Fame with her trumpet, etc. On the west side, Mars and Venus are represented as caught in a net by Vulcan, who is attended by Envy: the God of Sleep is showering poppies on the head of Mars; Mercury is descending towards them; and Time and Janus, Cyclops, etc., are looking on. Towards the North, the Graces appear to be spectators of the scene; beyond is a nymph, who is taking a sketch of it; whilst husbandmen are standing and laughing from the between the pillars. In the background is the sea, from which Neptune has just disembarked with his attendants; and Bacchus is bestriding a barrel on the shore. The east side exhibits Vulcan at his forge, Cyclops working near him. In this group the artist himself appears." Equally crowded and confused designs are seen on five other ceilings here.

Take, for instance, the ceiling of the

Great Drawing-room, which represents the gods celebrating the nuptials of Jupiter and Juno. In the centre is the festive table—Jupiter and Juno at its head—at the sides, Pluto, Proserpine, Neptune, Amphitrite, Cupid and Psyche. At the bottom two cupids holding doves; whilst Mercury is seen flying to Jupiter with a paper ininscribed, "*Fit totum Fabula cælum.*" Minerva and Mars are in attendance, Ganymede is presenting the cup, and Flora receiving refreshment from a Cupid while Bacchus is busy pouring out wine, and Bacchanalians carousing, with Ceres and the Nereides. Near them is the figure of Plenty, seated with cornucopias, from which are issuing bread, fish and fowl. Near the window are seen Cyclops and others carrying viands, and female attendants strewing flowers. It was poor stuff, but at that time very fashionable. As Pope sang—

> "On painted ceilings you devoutly stare,
> Where sprawl the saints of Verrio and Laguerre."

Only neither the Italian master or his French pupil were much concerned with saints though they certainly took upon

themselves the beatification of generous patrons. Laguerre besides assisting his chief, did a considerable amount of independent work at Hampton Court, Marlborough House, Burghley, Petworth, Blenheim and elsewhere. He was equally florid, given to mythological, Greek and Roman personages, and while not showing the fertile fancy of Verrio, was quite as chaotic and deficient as a draughtsman and colourist.

They were followed by a crowded, busy school of disciples, who worked on a less ambitious scale, but showed similiar lack of taste and sense of proportion.

For a time a note of dignity was introduced by Sir James Thornhill, who added to a thorough mastery of human anatomy, a feeling for beauty, an exquisite sense of colour and great skill in composition. We have already referred to his monochrome work in St Paul's Cathedral, of which only his sketches now remain. A fine example of his method and taste is to be seen on the ceiling of the Queen's State Bed-chamber at Hampton Court. It represents Aurora rising out of the sea, in her golden chariot,

drawn by four white horses, and attended by cupids. Below are figures representing Night and Sleep. The cornice is adorned with four medallions, bearing portraits of King George I. with crown; Caroline, Princess of Wales; George II., Prince of Wales; and their son, Frederick, later Prince of Wales, as a boy of nine. Thornhill also worked at Windsor. Perhaps his best-known paintings are the decorations at Greenwich Hospital, but these, with the exception of the cupola painting, are in a more inflated style, which only the stately proportions of these halls make tolerable. In the centre of the cupola is a great compass with its points duly bearing. The coved sides are filled with four gigantic groups of figures, representing the winds, painted in monochrome in a manner to suggest high-relief sculpture. A winged figure of the East Wind rises from the East, bringing light to the world with a flaming torch, while with his left hand he pushes the morning star into the dark. Round about him are half figures and boys showering the morning dew. The South Wind, with dripping

wings, is seen squeezing rain out of a bag, while little boys in a variety of vigorous attitudes are casting thunder and lightning earthwards. The West Wind, accompanied by Joyful Spring playing on a flute, is surrounded by small zephyrs scattering flowers from baskets. Cruel Boreas, issuing from the North, appears with dragon's wings, accompanied by a fierce band showering down hail and snow. Certainly an appropriate scheme for such a place. More gorgeous colouring and crowded composition is seen in the Great Hall. In the middle of a large oval we see seated under a canopy of State, attended by the four Cardinal Virtues, King William and Queen Mary, Concord sitting between them, while Cupid holds the sceptre. The King is presenting Peace and Liberty to Europe and trampling on Tyranny and Arbitrary Power. Beneath the group stands Architecture, holding a drawing of part of the Hospital and pointing upwards to the royal founders. We also see Time bringing Truth to light, while Wisdom and Virtue in the person of Pallas and Hercules destroy Calumny, Detrac-

tion, Envy and other vices. In the circumference of the oval are the twelve signs of the zodiac, presided over by Flora, or Spring, Ceres, or Summer, Bacchus, or Autumn, and Hyems or Winter. Apollo on high, in chariot drawn by four white horses, and accompanied by the Hours, Dews falling before him, sheds brilliant light on the whole scene. The oval frame is supported by sculptured figures amidst a profusion of trophies, all painted in monochrome, thus throwing up the fresh colouring of the great central picture. Each end of the ceiling is raised in perspective with balustrades, colossal figures supporting elliptical arches, forming galleries in which are grouped Arts and Sciences, relating to Navigation. In the middle of the gallery next the Upper Hall is the stern of a British man-o'-war, Winged Victory filling her with spoils from the enemy. Under the step is London sitting on the Thames and Isis, with the smaller rivers bringing treasures to her. The River Tyne is there pouring forth abundance of coal. In the centre of the Gallery at the lower end of the Hall, is

the stern of a Spanish galley filled with trophies. Under it is the Severn with her lampreys, and the Humber with his pigs of lead. On the left hand is Tycho Brahe, near him Copernicus with his System in hand, accompanied by a philosopher pointing to some mathematical figures of Sir Isaac Newton. On right of gallery is Flamstead the astronomer, his disciple Thomas Weston, Master of the Hospital, assisting him in taking observations of Eagre on the Severn, while an old man marks time on a clock. In the four angles are the Elements, Fire, Air, Earth and Water, offering their productions to the King and Queen, while Fame at the end of the oval descends sounding the praise of the pair. On the North side of the Hall are painted in niches eight of the social virtues.

The ceiling of the Upper Hall is raised in perspective, showing Queen Anne and Prince George of Denmark surrounded by Concord, Liberality, Piety, Victory and other Virtues. Neptune attended by Trittons, presents his trident to Prince George as Lord High Admiral, and other

divinities advance with offerings, while Juno accompanied by Aeolus commands a calm. In the covings are figures of the four quarters of the globe admiring British maritime power, the angles being framed with the arms of England, Scotland, France and Ireland, adorned with festoons of sea-shells, trophies of war and pots of flowers. Inflated no doubt all this is, but the mock-heroic is redeemed by the clever grouping, the studied balancing of the compositions, the beauty and strength of individual figures, and the appropriateness of the symbolism.

Thornhill's active rival for royal patronage a most indefatigable worker and favourite with the nobility, was William Kent, a man of very different calibre. A decorator of much merit and some originality, he aimed at greater things, and though receiving distinguished support, proved himself an inferior architect and very bad painter. Specimens of his work are numerous, but perhaps the most favourable, and certainly among the most important, is the painting on the walls of the King's Staircase at Kensington

Grand Staircase, Kensington Palace. Painted by William Kent.

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Palace. The ceiling is flat, the background painted grey. There is a centre panel and smaller panels, the whole ceiling heavily framed with modelled plaster. The centre square encloses a circle, within which are four semi-circular spaces, the whole representing a pierced dome with galleries. Three of these galleries are filled with musicians playing on instruments, and spectators gazing on the crowded walls, filled with figures shown walking up steps and garden terraces. In the fourth semi-circle Kent himself, palette in hand, and accompanied by two pupils, is seen. The scheme was altogether too big for the artist, who was unable to manage convincing grouping. There are several other ceilings of his here, betraying only too glaringly the influence of Verrio and Laguerre. For instance, in Queen Caroline's Drawing-room, within a heavy frame of moulded plaster, the Queen, represented as Minerva, is seen attended by History and the Arts, a set of heavy, simpering persons. In the King's Drawing-room, the coves are decorated with rather elaborate, but fine plaster

scrolls and architectural details, richly painted and gilt, medallions on each side being supported by female figures. On the flat part of the ceiling is a deeply moulded plaster frame, enclosing a badly drawn, crudely coloured picture telling the story of Jupiter and Semele.

This kind of thing, which called forth Pope's satire, was largely imitated, peopling the ceilings of town and country houses with a monstrous army of mythological, allegorical and historical personages, whose constant presence must have been a wearisome impertinent intrusion, scarcely improved by their distorted writhings. Charles Dickens has told us how, from the ceiling of Mr Tulkinghorn's Chambers in Lincoln's Inn Fields, "foreshortened allegory, in the person of one impossible Roman upside down, pointed with the arm of Sampson (out of joint, and an odd one) obtrusively towards the window." For many years the persistent Roman has been pointing with no particular meaning, until one morning he is found "pointing at a table, with a bottle (nearly full of wine) and a glass upon it, and two

candles that were blown out suddenly, soon after being lighted. He is pointing at an empty chair and the stain upon the ground before it that might be almost covered with a hand. These objects lie directly within his range. An excited imagination might suppose that there was something in them so terrific, as to drive the rest of the composition, not only the attendant big-legged boys, but the clouds and flowers and pillars too—in short the very body and soul of allegory, and all the brains it has—stark mad. It happens surely, that everyone that comes into the darkened room and looks at these things, looks up at the Roman, and that he is invested in all eyes with mystery and awe, as if he were a paralysed dumb witness." It is this ever present incongruity of a pictorial ceiling of the heroic school that makes them especially objectionable, thoroughly unrestful.

Scarcely more pleasing to the eye or reposeful to the mind were the crowded allegories of Campbells, Richardsons and others, or even the little inanities of a Cipriani and an Angelica Kauffmann.

The truth is, the pictorial ceiling to be worth anything must be distinctly decorative, like the best of those in Venice, or, in the French capital, Benjamin Constant's magnificent painting in the Reception Hall of the Hôtel de Ville, showing Paris welcoming the world to the banks of the Seine. But these triumphs, if we except religious paintings on church vaulting, are few and far between.

Before closing this chapter we must refer to a rather pleasing conceit carried out by Henry Holland at Carlton House, where the ceilings of the fine series of reception-rooms were all painted as skies; not of the classic symbolical kind, but with different shades of blue and natural cloud effects. It was just sufficiently decorative, yet not obtrusive, to suit any accessories of wall coverings and furniture.

CHAPTER XIII

PRESENT DAY PRACTICE

During the Victorian era various causes combined to emphasise the tyranny of the plain white plaster ceiling, so bitterly railed against in the eighteenth century. For one thing the dead, and deadening, hand of building lessors became oppressive in the land, so that the majority of men looked upon their homes as mere temporary abodes, taking little pride in them. It was a tyranny scarcely made more tolerable by the monstrous usurpation of that nondescript centre ornament(?), the so-called rose, with its central bud (sometimes expelling a gasolier, as though from sheer weariness and disgust), surrounded by radiating rings of foliage, each row of a different kind, the outer ring of attenuated acanthus alternating with foliated spikes, terminating in a blossom the like of which

nature never produced. This hideous travesty of the old rose (that ancient symbol of the sanctity of domesticity and joviality—for it represented the culminating points of the roof-tree; of the most sacred and tender things that Christianity has to teach—so that all that passed "under the rose" was secret) is an eyesore possessing distracting attractiveness, revealing all too well the blatant nakedness of its surroundings.

Charles Reade led a vigorous crusade against this state of things, and in his "Builders' Blunders" speaks of "standing on the first floor of the thing they call a house, with a blunder under my feet—unvarnished, unjointed boards, and a blunder over my head—the oppressive, glaring, plaster ceiling, full of its inevitable cracks, and foul with the smoke of only three months' gas." This "plaster ceiling" he adds, "may pass with London builders for a venerable antiquity that nothing can disturb, but to scholars it is an unhappy novelty, and, in its present form, inexcusable. It was invented in a tawdry age as a vehicle for florid ornamen-

tation; but what excuse can there be for a *plain* plaster ceiling? Count the objections to it in a kitchen, (1) A kitchen is a low room, and the ceiling makes it nine inches lower; (2) White is a glaring colour, and a white ceiling makes a low room look lower; (3) This kitchen ceiling is dirty after a month's wear, and filthy in three months, with the smoke of gas, and it is a thing the servants cannot clean; (4) You cannot hang things on it. Now change all this: lay out the prime cost of the ceiling, and a small part of its yearly cost, in finishing your joists and boards to receive varnish, and in varnishing them with three coats of copal. Your low room is now nine inches higher, and looks three feet. You can put in hooks and staples galore, and make the roof of this business-room useful; it is in colour, a pale amber at starting, which is better for the human eye than the white glare, and, instead of getting uglier every day, as the plaster ceiling does, it improves every month, every year, every decade, every century. Clean deal, under varnish, acquires in a few years a beauty oak can never attain to."

This revolt has borne fruit; firstly in the flat ceiling once more being treated as a surface to be decorated, and secondly, in a return to the boarded, or plaster panel ceiling with visible joists. The former is applicable to town houses, be they ever so fine, or ever so commonplace; the latter to the modern and rather uncertain but decidedly improved suburban villa, and to the more characterised country cottages or modest dwellings.

Flat ceiling decoration has taken four main forms: revival of mixed gesso painting or modelling on plaster; covering the ceiling with some imitation of plaster work or wood carving; the application of printed or embossed paper.

Modern gesso work is generally applied to a surface of plaster or fibrous plaster, of which, panels and broad decorative details are found. The detail-decorations—figures, flowers, scrolls—are then applied in a semi-liquid, or very plastic, composition. Walter Crane used a mixture of one part of resin, boiled in four parts of linseed oil and six of glue, to which sufficient soaked whiting was added to form a thick

cream. Mr G. T. Robinson used plaster dissolved in liquid glue, to which a little oil was added to secure fluency. If desired these mixtures can be tinted before application, or painted when the decoration is completed, but still soft. The stiffer mixtures are handled like putty, or as a modeller handles clay, being put on the surface to be decorated in thin dabs of requisite size and shape, the ornament then being formed by removal of superfluous material. If the composition is of the more fluent description, it is applied by means of brushes of different sizes. In this way low relief work of considerable delicacy and durability can be carried out. It is practically an exaggerated form of impasto painting, and thus the actual touch of the artist is shown on all the work. The danger is that finicking over decoration may result, a defect which was observable even in some of Walter Crane's ceilings.

Wren used to form many of his plaster ornaments in moulds the casts subsequently being fixed to the ceilings. Others followed his example, as did Adam with his composition. But in 1856, a French

modeller, L. A. Desachy, improving on certain dateless rule of thumb methods, took out a patent for "producing architectural mouldings, ornaments, and other works of art formed with surfaces of plaster." It was a process for moulding with canvas as a basis, and he took powers to lay wires "into and between the two or more layers of canvas. Flat surfaces are strengthened with canvas, wires, hooks and pieces of wood may be inserted whilst the plaster is in a fluid state." It was, in fact, a process to enable large sections of decorative plaster work to be made quite light, very little material being used, whilst durability was assured, and handling made quite easy. The ancient Egyptians had availed themselves of a similar process for decorating mummy cases, dipping canvas in liquid plaster, wrapping the cases round and adding cast low relief plaster decoration, or merely a coating of plaster which was painted and varnished. Desachy's process attracted attention, Owen Jones being among those architects who employed it largely. Fibrous plaster possessed obvious advan-

tages for many kinds of work, for instance, the decoration of temporary buildings; but as manipulation improved, its value for permanent work was recognised. Much of the fine plaster ornamentation at the Paris Opera House is in fibrous plaster, and this material is now commonly used for ceilings in public buildings and private houses. The method enables panels and sections of large and small size and all kinds of shapes to be moulded, safely transported and then nailed in position to the joists. Of course, any style of decoration may be carried out in this work, whether in low, medium or very high relief, while paint, tempera or oil, and gilding can be applied.

While fibrous plaster can be moulded into any size and shape desired, it is, of course, hard and unbendable, though it may be cut away where necessary. The need of some more pliable material, producing much the same effect as fibrous plaster, was felt, and as a result a large variety of fabrics have been produced, comprising a canvas backing, or composed of fibre, a glutinous substance and filling material. For instance, "Lincrusta Walton" is a

mixture of oil and very finely powdered cork, pressed in moulds on canvas. "Lignomur" is a preparation of wood fibre embossed. "Anaglypta" is a form of moulded paper pulp, while in the composition of the associated "Salamander" asbestos enters largely. All these materials are capable of being impressed with any kind of pattern in low and medium relief, whether floral, geometrical, or genre subjects are chosen. The advantage is that they are not only easily applied to ceilings, but may be cut or bent to cover covered surfaces or to form canopy ceilings. Of course, they can be painted in any media preferred.

A drawback at first attaching to the use of the canvas materials (and to commercial fibrous plaster, that is to say plaster slabs manufactured wholesale, and not to special design for a special room) was that it was difficult to choose a pattern which did not betray the mechanical nature of the treatment. For some time past, however, great care has been taken in designing patterns which may be carried out in small and large panels, corner pieces, etc., so

that by subtraction or addition any sized surface can be fittingly covered. It now merely resolves itself into a question of showing judgment in selecting a type suitable for any given position.

Metal ceilings have also come into extensive use. They are stamped into thin sheets with embossed designs, generally in imitation of decorated tiles, or mosaic work the under surface being coated with a non-tarnishable patina and the upper enamelled in colours. These ceilings are generally made to adhere to boards, or to the joists by means of a special cement. Or they may be tacked down with ornamental headed zinc nails. Conventional patterns being chosen, and suitable border strips being also provided, it is easy enough to contrive good joining. These enamelled metal ceilings are excellent for bath-rooms, corridors, nurseries, and school-rooms, and kitchens, because they can be washed regularly. For tropical climates and for the " week-end " type of bungalow, where the inroads of vermin and damp have to be guarded against, they are to be recom-

mended. It is to be observed that the enamel can be made with polished or mat surface.

Ferro-concrete construction is often looked upon as inimical to artistic development of building. This has certainly not been the case as regards the decoration of ceilings. In schools and other public buildings, the ferro concrete beams are exposed, forming deep bays, while the arched braces have been utilised to give handsome coving effects. Of course the sides and soffits of the beams and the sunken panels can be decorated like ordinary plaster work. In small ceilings, where only slender beams are required, these intersect at regular intervals to form shallow, square coffers, the soffits of these concrete beams being moulded with plain fillets forming a frame round each coffer, or they may be decorated with a running foliage pattern, with moulded bosses at the intersections. The coffers themselves may be decorated with raised mouldings. Of course the finishing coat of the concrete is of a rather fine quality, but it gives a more rugged appearance than plaster, which is

not unpleasing. Concrete can be coloured as desired. Very good examples of this latter form of decoration are to be seen in the Shropshire County Council Offices at Shrewsbury. The principle of reinforcing mortar with a steel skeleton, however, has led to a remarkable development—the suspended ceiling, which may be compared to Wren's ceiling at the Sheldonian Theatre. When the reinforcement consists of sheets of expanded metal, or of a network of steel wires, woven into locked mesh panels, these sheets can be cut and bent to any desired shape, and fastened by means of steel hangers immediately below the flooring joists or roof principles, or at some distance below them. This last-named method is often adopted in order to form a chamber for the accommodation of pipes, electric wires, and ventilating ducts. Moreover, the sheets can either be stretched flat from wall to wall, curved to accommodate itself to the architectural features of the room, or formed into bays and coves. The metal is then covered either with fine concrete and a plaster finish, or only with plaster, the expanded

metal or wire mesh affording a splendid key for the plaster. Of course the plaster can be stamped, moulded or modelled, and painted as desired. Good examples of this kind of work can be seen at the Royal College of Science, South Kensington, the Dining Hall at the Britannia Royal Naval College, Dartmouth, and the Westminster City Council's Offices.

An easy way of mitigating the objection to plain white ceilings was easily found by covering the surface with wall-paper, and this is still largely in vogue. The difficulty of finding suitable patterns, that is, papers not obviously intended to cover perpendicular walls, has been overcome by designing special ceiling papers. As a rule, plain, pale tints are chosen, contrasts of colours being avoided. In America, however, a favourite method is to divide up the ceilings with moulded ribs of wood, and filling in the panels with richly coloured papers of the embossed variety. If discretion is observed there is no reason why very charming effects should not be provided in this way. For instance, if we have oaken or gilded ribs, with buff or

dark green paper, bordered respectively with a deep crimson and a bright, not too deep pink, we obtain a combination quite suitable for a library or study. 'A' good colour scheme for a dining-room would be maroon, with dull gold embossed border. For drawing-rooms and boudoirs a light bright blue, a creamy blue of light biscuit gemmed moderately with more decided colours in harmony with the decorative scheme of the room, the dividing ribs being gilded or coloured, would look well.

Where the panel type is not adopted a room is often canopied—that is to say, the ceiling paper is brought down on the sides of the walls, six, twelve or eighteen inches, and separated from the wall-paper by a gilded or coloured moulding. A modification of this canopied style may be tried in this way : divide the ceiling into triangles, choosing a diapered paper, covering the junction in the centre with a rose, circular or boss ornament, and the juncture at the sides with a moulded cord. Bring the wall-paper down the side of the walls and end with imitation fringe or rich embossed border. The cord and fringe should

imitate either bullion or bright-coloured silk. In this way a tent-like effect can be produced, quite suitable say for the "snuggery" of a globe trotter. Embossed leatherette paper in browns gives very effective renderings of dark or light carved wood ceilings, relieved, occasionally by a slight touch of gold.

In the latter part of the eighteenth century it was quite fashionable to have "Indian" or "Chinese" rooms, with lacquered walls and ceilings bearing more or less truthful oriental ornamentations. A modified revival of this is sometimes seen where walls and ceilings are covered with Japanese fibrous paper, which is both embossed and slightly coloured. If the ceilings are framed, or divided up into panels, with bamboo mouldings, the effect is improved.

So much for the flat plastered ceilings, but Charles Reade's idea of exposed joists and boards is, in part, at least, very commonly adopted by present-day architects—occasionally for town houses, but more generally for the better type of suburban dwelling, and country houses

both of the cottage and studiedly simple mansion type. It is true we do not always have the plain varnished joists and boards, although this is often seen. More frequently, however, we have wooden joists in combination with plaster, the beams being either plain, decorated with mouldings or with carved ornamentation. For the living rooms of cottages, the halls, dining and billiard rooms of more pretentious houses, the beams are often varnished or painted with a dark stain, the deep coves being filled with plain white plaster, and then we have practically a return to the very favourite old time colour scheme : a contrast in black and white. Endless variations are introduced by the grouping of the beams. We may have joists running across the room, or longitudinally; or in long rooms we may have one or two heavy longitudinal beams intersected by crossing joists of slighter scantling, thus forming a diaper pattern, the ornamentation being painted, they are either stained or varnished, but may be decorated with centre roses, stencilled borders or a running diaper pattern, the ornamentation being

carried out either in white or black, some shade of brown, or even in bright colours. More often this form of treatment is reserved for plastered surfaces between joists, and they may have quite elaborate painting. The beams, whether varnished or stained, or, as is sometimes done, painted, are decorated with curvilinear or running floral patterns on their soffits, or their sides, or both.

In one successful example where a billiard room has two longitudinal beams with slimmer cross joists, the ceiling is finished in a creamy white, the soffits of the timbers being decorated with stencilling in red, black and gray.

It is a most hopeful sign, this renewal of interest in the ceiling, even in modest houses for it reveals a revolt against the reign of ugliness introduced during the last couple of centuries.

CHAPTER XIV

SOME NOTES ON LIGHTING

A STUDY of ceilings naturally leads us to particular consideration of illumination. In the Orient, where sunray glare and heat gave special importance to the problem of lighting interiors in the daytime, it was early recognised that convenience and æsthetics demanded that illumination should come from above. We have seen how they managed this by placing partially obstructed windows high up in walls, and by piercing roofs or ceilings with oblique slits. They adhered to the same principle in artificial lighting, using hanging devices supporting tiny oil lamps.

Both the Semitic races and the Egyptians appear to have used the tree form of support, or candelabra. With the Greeks and Romans, the torch, or tall stand supporting an oil lamp, prevailed, although

they, too, knew and used the suspended oil lamp.

Hanging candelabra, or chandeliers, came into use in Europe towards the end of the ninth century, by way of the church, gradually spreading to palace and castle. But the standard candelabra and wall bracket largely prevailed, the latter being an elaboration of primitive resinous torch supports. These consisted of wall sockets, and above them a projecting bar, terminating in a ring: the torch was placed through the ring, its base resting in a socket; consequently being inclined outwards. Nevertheless the chandelier was in great request, first being of iron or brass, then of silver, followed by carved wood covered with gilt *gesso duro,* cut glass, bringing us down to the gasolier and the electrolier. It must be confessed that unless carefully designed, these do not harmonise with Renaissance style, especially, when the decoration includes miniature paintings or high relief figure modelling. They are always out of place pendant from pictorial ceilings, for then the incongruity is too manifest, often rather horribly so. As to this, we will

refer the patient student to the old Verrio genre ceiling in the Ball-room at Windsor. The ordinary gasolier and electrolier are not very good distributors of light, indeed, though giving greater volume, they afford an inferior diffusion to that of the old chandelier, with its numerous light points, the flames, moreover, reflected from metal surfaces. In this connection, the cut glass lustre is an admirable contrivance, well designed; being obviously an illuminating contrivance it harmonises with most styles of decoration, while the very large number of facets act as prisms, collecting and reflecting light in so many directions as to give a satisfactory degree of diffusion.

With the comparatively low plaster ceilings of the Tudor and Jacobean periods, the sconces or wall brackets for candles produced very good results, as the light was reflected from the white or buff surface, and as the brilliancy of any one point was low, no great inconvenience would be felt from the light source being on a level with the normal range of vision. But the intense brilliancy produced from gas jets (especially from incandescent mantles) and

from electric lamps makes them very undesirable for direct light within the ordinary plane of vision. Moreover, the gas flame or incandescent burner and electric bulb do not lend themselves to decorative blending with many styles, while the unshaded lamps produce too great a contrast of light and shade. Therefore some form of screening the actual source of light is necessary. This may be attained by the use of ground glass globes, or those made on the holophote principle—with ribbed surface, by which diffusion is secured; or by the use of shades. Any of these can be designed to harmonise with other decorations.

The use of lamp glass with ribs of different sizes and angles, permitting of the deflection of light rays as desired, and of inverted shades, suggested the indirect method of illumination. The most common type is an inverted bowl pendant from the ceiling, the lights being placed above, and so concealed by the bowl. The result is that the light is reflected on the ceiling and deflected therefrom to walls and floor, which gives a great measure of diffusion.

The bowls may be of metal or other opaque substance, with the concave portion polished to act as a reflector; or we may have semi-transparent substances like ground or ribbed glass, opaline or kindred materials. The latest innovation is a reversion to a very old plan to secure softened light, translucent alabaster being employed for the bowls. It is quite apparent that such pendant globes may be designed to suit any style of ceiling, and placed so as to add to and not detract from the decorative effect.

Another form of indirect lighting is to utilise the new tubular electric lamps, either with filaments, or some form of gas like the mercury vapour lamp, or the Moore carbonic acid lamp, these being concealed in the cornice, and the light reflected on the ceiling.

From indirect lighting the next step was to diffused illumination, the idea being to reproduce daylight effects. The usual way of attaining this end is to use very flat, finely ground, glass bowls, covered in at top, and enclosing either gas or electric lights. A large measure of diffusion is

thus secured. Greater effect is produced if concave ground glass bowls are placed in the ceiling itself, the light source being behind. We then have a number of moons diffusing light from overhead. These can be easily adjusted to suit most decorations, being placed in coffers, at intersection of beams, or made the centres of flowers or some geometric pattern.

Diffused light of this kind is well-adapted for lighting corridors, large entrance halls, picture galleries and museums. But if the illumination is intense enough to satisfy modern demands, it is very fatiguing to the eyesight, producing eye strain from the very same cause as snow-blindness, or the weariness that comes over those who have to suffer the glare from a tropical or semi-tropical sun coming from above and reflecting from white level stretches of sand. The eye is attacked from all sides and is exhausted. The better way is to be content with indirect light; or very soft diffused light supplemented by a few well-placed lights. For instance, let us consider a ceiling divided up into panels by means of beams

or heavy mouldings. Let the low concave glass light diffusers be placed in the centre of the panels or coffers, and then let a few inverted gas mantle burners or electric lamps of low candle power hang from the intersections of leaves or mouldings. These will provide moderate points of attraction, and just sufficient variation in distribution to relieve the eye. Another plan is to have soft diffused illumination from the ceiling supplemented by a standard or two used as reading or working lamps, but concealing the actual source of light, having regard to their being in the direct line of vision.

It is to be hoped that from these few notes it will be gathered that modern improvements in illumination should be studied from the æsthetic point of view, for it will then be seen that they can be enlisted as aids to the decorative treatment of interiors.

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